U.S. DEPARTMENT OF COMMERCE
National Technical Information Service

PB-273 580

Supplement to Effects of Thermal Discharges on Physico-Chemical Processes and Water Quality, Vistula River, Poland

Institute of Meteorology and Water Management, Warsaw (Poland)

Prepared for

Corvallis Environmental Research Lab, Oreg

Nov 77

EPA-600/3-77-074
November 1977

INSTITUTE OF METEOROLOGY AND WATER MANAGEMENT

PB 273 580

SUPPLEMENT TO FINAL REPORT

on project

PR – 5 – 532 – 5

STUDIES ON EFFECTS OF HEATED WATERS DISCHARGED FROM THE KOZIENICE POWER PLANT ON THE PHYSICO-CHEMICAL PROCESSES IN VISTULA RIVER AND ON THE WATER QUALITY

BASIC DATA

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U. S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA. 22161

WARSAW, POLAND

EPA-600/3-77-074b
November 1977

SUPPLEMENT

to

"EFFECTS OF THERMAL DISCHARGES ON PHYSICO - CHEMICAL PROCESSES AND WATER QUALITY"

VISTULA RIVER, POLAND

RESEARCH GRANT No. PR-05-532-5

BASIC DATA

Institute of Meteorology and Water Management
Podleśna 61, Warsaw, Poland

Prepared for
CORVALLIS ENVIRONMENTAL RESEARCH LABORATORY

OFFICE OF RESEARCH AND DEVELOPMENT
U.S. ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

TECHNICAL REPORT DATA (Please read Instructions on the reverse before completing)		
1. REPORT NO. EPA-600/3-77-074b	2.	3. RECIPIENT'S ACCESSION NO. PB273580
4. TITLE AND SUBTITLE Supplement to "Effects of Thermal Discharges on Physico-Chemical Processes and Water Quality" Vistula River, Poland		5. REPORT DATE NOVEMBER 1977 6. PERFORMING ORGANIZATION CODE
7. AUTHOR(S) Jan R. Dojlido and Staff		8. PERFORMING ORGANIZATION REPORT NO.
9. PERFORMING ORGANIZATION NAME AND ADDRESS Institute of Meteorology and Water Management Podlesna 61, Warsaw, Poland		10. PROGRAM ELEMENT NO. 11. CONTRACT/GRANT NO. PL-480 PR-05-532-5
12. SPONSORING AGENCY NAME AND ADDRESS Environmental Research Laboratory - Corvallis, OR Office of Research and Development U.S. Environmental Protection Agency Corvallis, Oregon 97330		13. TYPE OF REPORT AND PERIOD COVERED Final January 1973-Dec. 1975 14. SPONSORING AGENCY CODE EPA/600/02

15. SUPPLEMENTARY NOTES
This data volume supplements the printed EPA report--EPA-600/3-77-074a:Effects of Thermal Discharges on Physico-Chemical Processes and Water Quality--Vistula River Poland

16. ABSTRACT
The study on the influence of thermal water discharge from the open cooling system of the Kozienice power plant on the thermal regimes and water quality of the Vistula River was carried out in the period from January 1973 to December 1975. The plant, situated at the 425th km of the Vistula River, first started in November 1972. Construction was finished in February 1975 with 1600 MWe capacity.

Studies carried out downstream of the plant included: (1) expedition type of survey, the temperature and velocity distributions in chosen cross-sections of the river and in the outlet channel were done. (2) periodical type of survey. The temperature and velocity distribution in the cross-section 1000 m downstream of the discharge and in the outlet channel. (3) everyday observations of the temperature in the three cross-sections at three points in ecah both banks and midstream at 7 a.m., 12 noon and 6 p.m

Special investigations were performed using a Coulter Counter to determine the influence of thermal water discharge on the number and size distribution of suspended particles in Vistula water.

This report contains basic data collected in these studies and a section on Precision of Analytical Methods.

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Electric power Heat affected zone Chemical reactions	Thermal pollution Vistula River Poland	07/B,C

18. DISTRIBUTION STATEMENT	19. SECURITY CLASS (This Report)	21. NO. OF PAGES
Release Unlimited	Unclassified	162
	20. SECURITY CLASS (This page) Unclassified	22. PRICE PC A05 MF A01

EPA Form 2220-1 (9-73)

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FOREWORD

Effective regulatory and enforcement actions by the Environmental Protection Agency would be virtually impossible without sound scientific data on pollutant and their impact on environmental stability and human health. Responsibility for building this data base has been assigned to EPA's Office of Research and Development and its 15 major field installations, one of which is the Corvallis Environmental Research Laboratory (CERL).

The primary mission of the Corvallis Laboratory is research on the effects of environmental pollutants on terrestrial, freshwater, and marine ecosystems; the behavior, effects and control of pollutants in lake systems; and the development of predictive models on the movement of pollutants in the biosphere.

This report contains the basic data to support analyses and conclusions presented in "Effects of Thermal Discharges on Physico-Chemical Processes and Water Quality" by J. R. Dojlido et al., published in EPA's Ecological Research Series.

A. F. Bartsch
Director, CERL

ABSTRACT

The study on the influence of thermal water discharge from the Kozienice power plant on the thermal regimes and water quality of the Vistula River has been carried out. Kozienice power plant is situated at the 425th km of the Vistula River. The first unit started its work in November 1972. The construction of the power plant was finished in February 1975, when the plant reached the capacity of 1600 MW. The plant is operating with open cooling system using Vistula water.

The research was performed in the period from January 1973 to December 1975.

The thermal study carried out downstream of the Kozienice power plant included:

- expedition type of survey. The temperature and velocity distributions in chosen cross-sections of the river and in the outlet channel were done.
- periodical type of survey. The temperature and velocity distribution in the cross-section 1000 m downstream of the discharge and in the outlet channel.
- everyday observations of the temperature in the three cross-sections at three points in each both banks and midstream at 7 a.m., 12 noon and 6 p.m.

Special investigations were performed to determine the influence of thermal water discharge on the number and size distribution of suspended particles in Vistula water. The study was supported by laboratory experiments, when the influence of temperature changes in range 5-32°C was tested. For measuring the particles the conductive method was used with the help of Coulter Counter.

This report contains basic data collected in these studies and a section on Precision of Analytical Methods.

INTRODUCTION

During the last years the demand for energy has increased rapidly. Average production of energy doubles every 10 years. Because the production of electric energy causes the loss of 60-70% of energy which is let out into space or waters it seriously endangers the natural environment. The building of power plants of large capacity and the preference of open cooling systems causes increased thermal pollution of water.

The aim of this work was to test the influence of heated water from the power plant on the physical, chemical and biochemical processes occurring in rivers and shaping the quality of water. The tests were conducted in the years 1973 to 1975 at the request of the U. S. Environmental Protection Agency (No. of Project PR-05-532-5).

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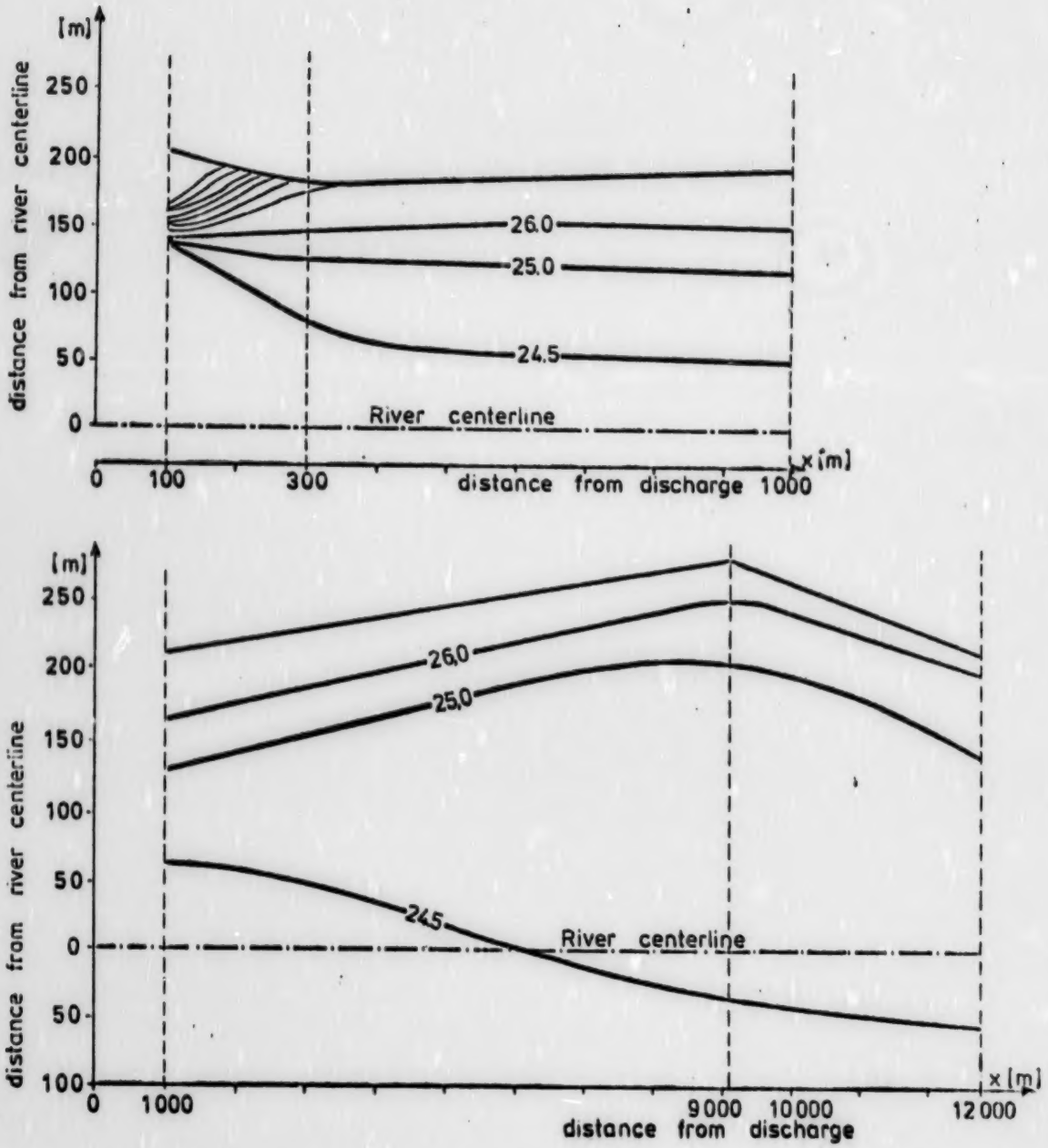
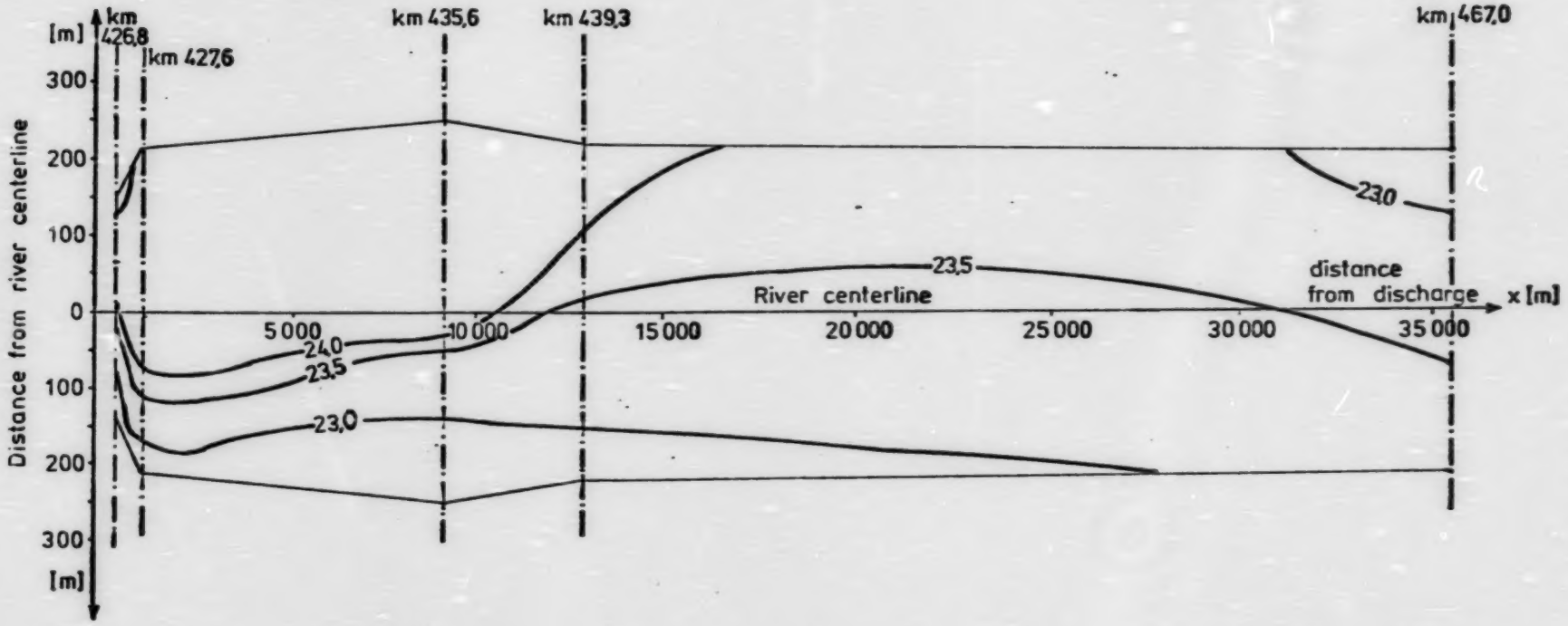
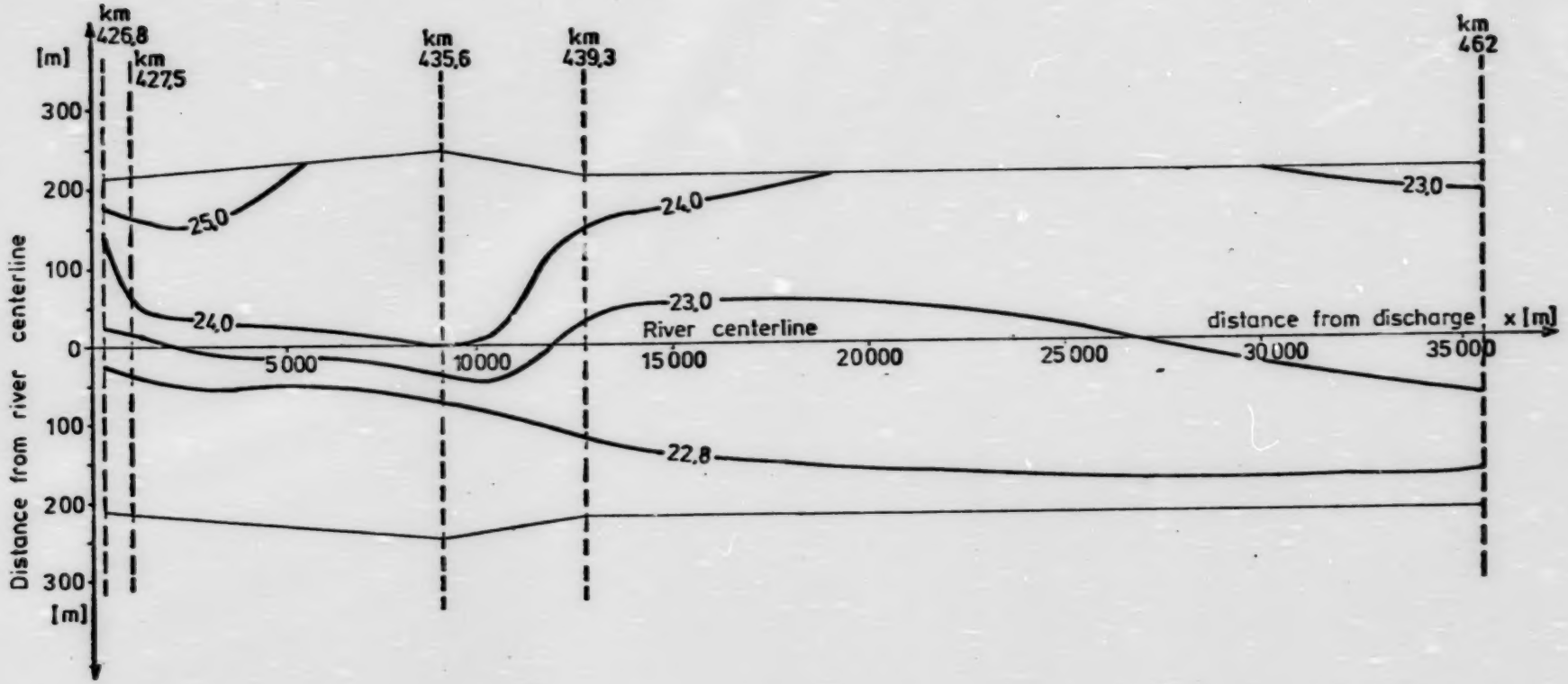


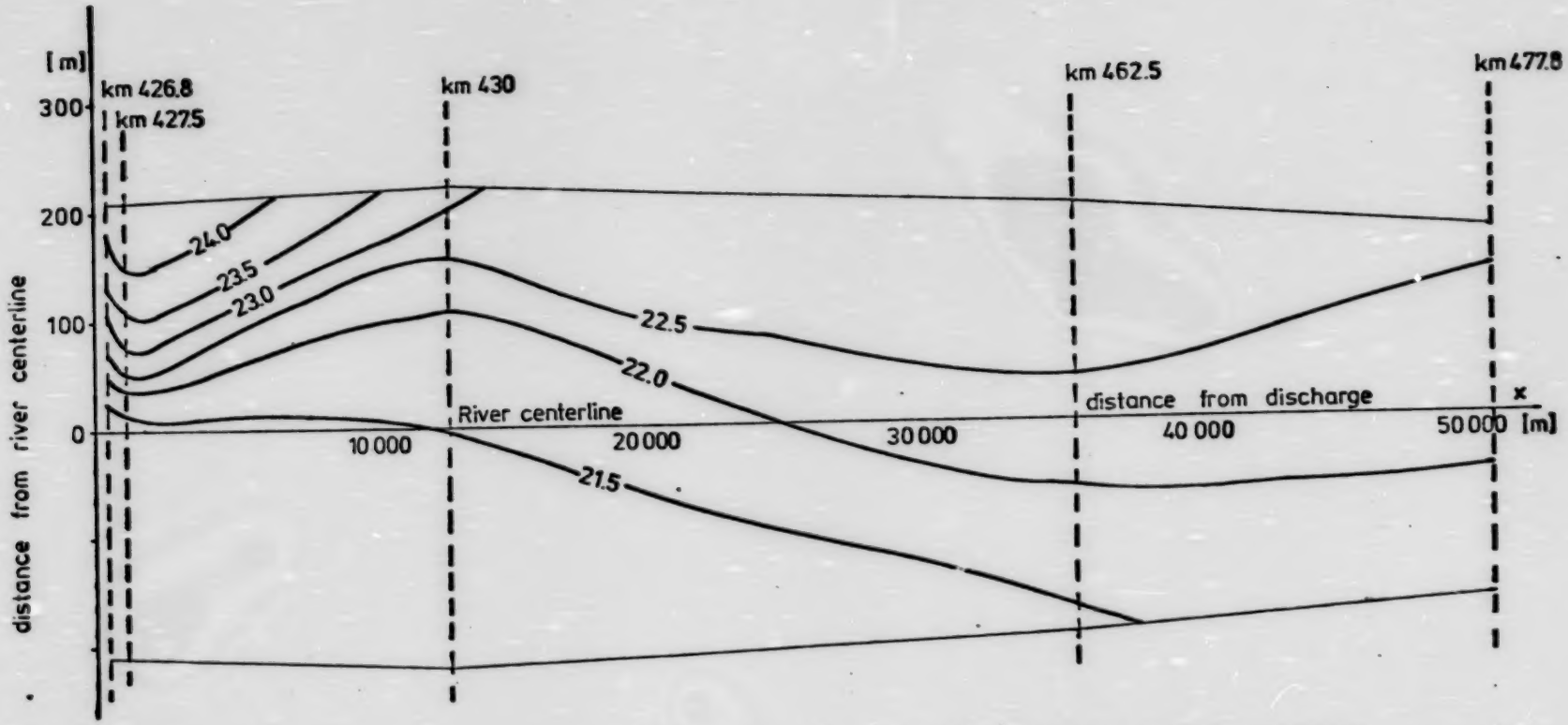
Enal.1. Surface water temperature distribution on Vistula stretch during surveys, 8.6-7.1973



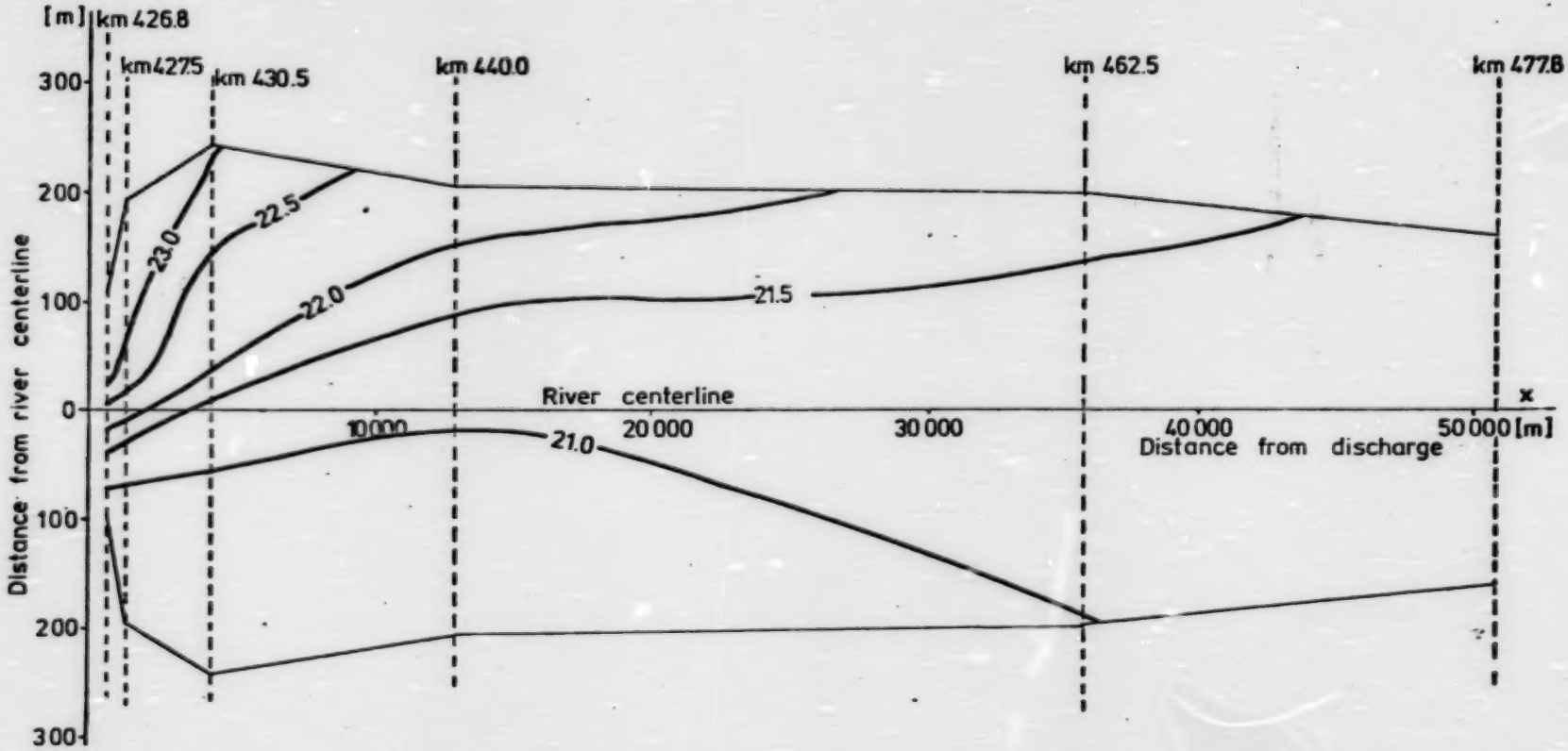
Encl.2. Surface water temperature distribution on Vistula stretch during surveys, 8.5-7.1974



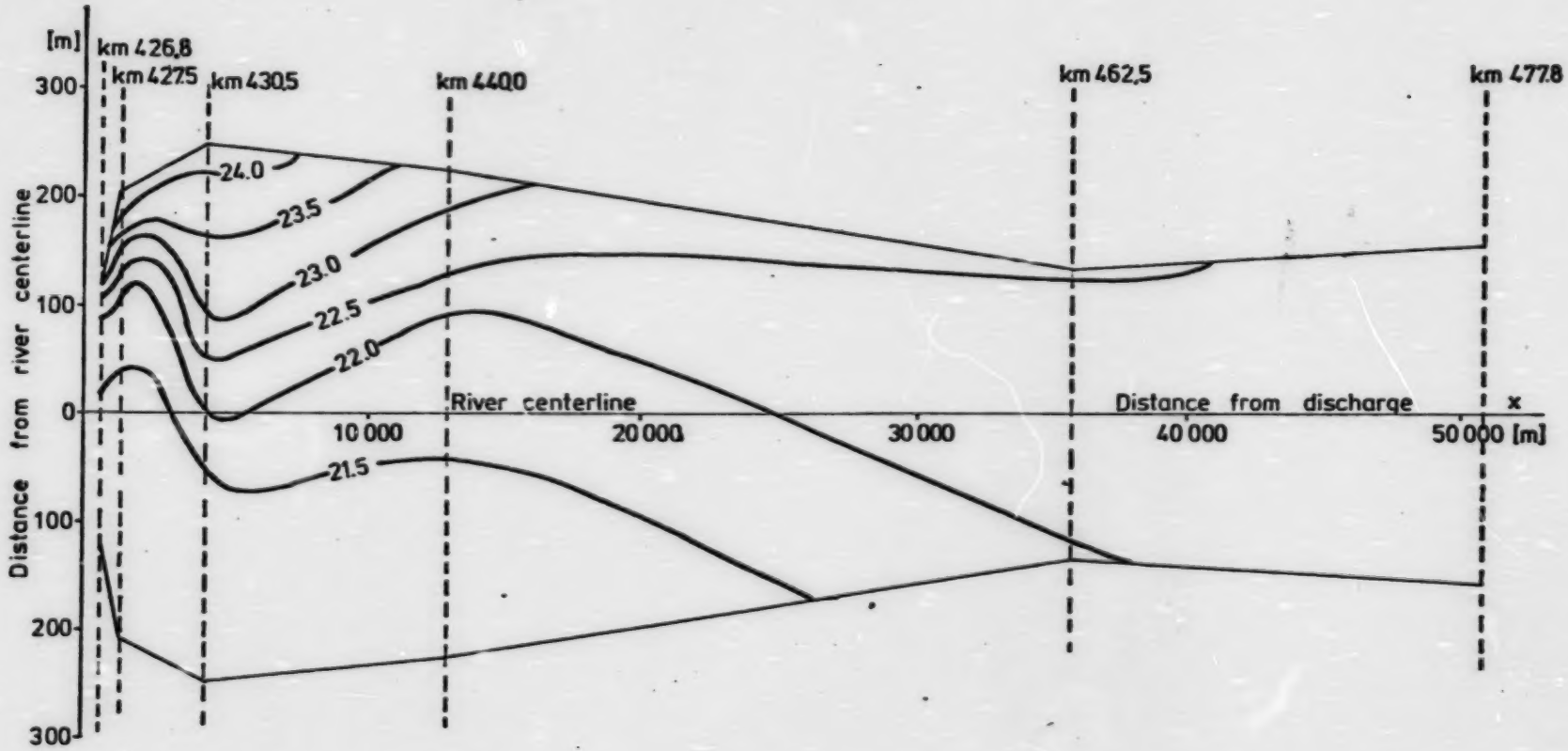
Encl.3. Surface water temperature distribution on Vistula stretch during surveys, 8.19-21.1974



Encl.4. Surface water temperature distribution on Vistula stretch during surveys, 8.5-7.1975



Encl. 5. Surface water temperature distribution on Vistula stretch during surveys, 8.19 - 22, 1975



Encl. 6. Surface water temperature distribution on Vistula stretch during surveys, 9.2 - 5, 1975

Precision of Analytical Methods

The precision of NH_3, NO_2, NO_3, $N_{org.}$, O_2, BOD_5, COD, PO_4 and residue determination has been defined as a standard deviation calculated as follows:

A on the basis of 5 - 10 results of parallel determinations from the same sample of Vistula water:

$$\sigma = \sqrt{\frac{\Sigma(x-\bar{x})^2}{n-1}}$$

For parameters characterized by large changeability the σ was calculated for few ranges of concentrations.

B on the basis of chosen examples two parallel determinations as customarily done in this Laboratory from a many year period of research on Vistula:

$$\sigma_r = \sqrt{\frac{\left[1/2\Sigma(x_1-x_j)\right]^2}{n-1}}$$

where: (x_1-x_j) = the difference between the results of parallel determinations

n = the number of results (pairs) in a given interval

The precision of the Coulter Counter method determined on the basis of results obtained while testing 3 identical samples of Vistula water is characterized by standard deviation σ (C). The averages from the results of count for each sample are given too.

A. Precision of analytic methods /according to special research/

Analysis	Method	Number of results (n)	Results mg/l			Standard deviation (σ)	
			min.	max.	average	mg/l	%
$N - NH_3$	Nessler,	5	0.38	0.40	0.39	0.01	2.4
		5	1.50	1.54	1.52	0.04	2.6
		5	2.04	2.06	2.05	0.01	0.5
		5	3.26	3.30	3.27	0.02	0.6
$N - NO_3$	Phenoldisulfonic acid	10	1.30	1.37	1.33	0.08	5.9
$N - NO_2$	Sulphanilic acid and naphthylamine	5	0.027	0.030	0.028	0.002	7.1
N - organic	Kieldahl,	10	0.98	1.12	1.05	0.047	4.8
O_2	Winkler, the azide modification,	10	9.6	10.2	9.9	0.235	2.4
BOD_5	The dilution technique	10	5.3	5.5	5.4	0.11	1.9
COD	The dichromate reflux method,	10	35.0	35.9	35.6	0.4	1.0
PO_4 - ortho	Ammonium molybdate,	10	0.035	0.060	0.050	0.008	16
PO_4 - total	Ammonium molybdate after dry dygestion	10	0.300	0.345	0.329	0.016	4.8
Residue total	Weighing	10	402	436	418	11	2.6

B..Precision of analytic methods . according to two parallel results of Vistula water investigation.

Analysis Range	n	$x_i - x_j$	σ_v
1	2	3	4
$N - NH_3$			
0.0 - 0.5	6	0.02	
		0.04	
		0.04	
		0.04	
		0.04	
		0.04	0.07
0.5 - 1.5	6	0.06	
		0.04	
		0.06	
		0.06	
		0.04	
		0.04	0.07
> 1.5	6	0.08	
		0.06	
		0.06	
		0.22	
		0.16	
		0.08	0.15
$N - NO_3$			
0.0 - 1.00	6	0.00	
		0.00	
		0.01	
		0.02	
		0.00	
		0.00	0.0067
1.00 - 1.50	6	0.02	
		0.05	
		0.02	
		0.00	
		0.00	
		0.06	0.034
> 1.50	6	0.00	
		0.00	
		0.05	
		0.05	
		0.05	
		0.00	0.0336
$N - NO_2$			
0.000 - 0.01	6	0.000	
		0.003	
		0.002	
		0.000	

1	2	3	4
		0.000	
		0.001	0.0042
0.010 - 0.050	6	0.003	
		0.000	
		0.000	
		0.000	
		0.003	
		0.000	0.0042
>0.050	6	0.000	
		0.005	
		0.002	
		0.000	
		0.008	
		0.000	0.0034
N - organic			
0.00 - 1.00	6	0.24	
		0.02	
		0.16	
		0.10	
		0.14	
		0.10	0.17
1.00 - 2.00	6	0.12	
		0.10	
		0.08	
		0.28	
		0.06	
		0.06	0.16
>2.00	6	0.12	
		0.12	
		0.12	
		0.47	
		0.14	
		0.29	0,29
PO_4 - ortho			
0.000 - 0.100	6	0.000	
		0.000	
		0.000	
		0.010	
		0.000	
		0.010	0.0045
0.100 - 0.200	6	0.005	
		0.010	
		0.000	
		0.000	
		0.010	
		0.010	0.0078

1	2	3	4
> 0.200	6	0.000 0.010 0.005 0.000 0.015 0.000	0.0067
PO_4 - total			
0.000 - 0.500	6	0.015 0.000 0.015 0.000 0.005 0.005	0.0089
0.500 - 1.00	6	0.015 0.000 0.010 0.010 0.030 0.040	0.0235
> 1.00	6	0.04 0.04 0.02 0.02 0.04 0.04	0.045
O_2			
0.0 - 7.0	6	0.2 0.1 0.0 0.0 0.0 0.0	0.067
7.0 - 10.0	6	0.1 0.2 0.1 0.3 0.2 0.1	0.224
> 10.0	6	0.4 0.1 0.2 0.1 0.1 0.2	0.246
BOD_5			
0.0 - 5.0	6	0.1 0.1 0.1 0.1 0.2 0.2	0.179
	11		

1	2	3	4
	5.0 - 8.0	6	0.1 0.2 0.1 0.1 0.2 0.2	0.201
	> 8.0	6	0.1 0.1 0.1 0.0 0.2 0.3	0.179
COD				
	0.0 - 20.0	6	0.9 0.0 0.0 0.9 1.0 1.0	0.848
	20.0 - 30.0	6	0.9 1.0 0.0 0.9 0.0 0.0	0.624
	> 30.0	6	0.0 0.9 0.8 0.8 1.0 0.0	0.782
Residue total				
	0 - 500	6	4 2 0 1 7 10	5.38
	> 500	6	4 1 5 11 3 12	8.06

Enclosure 8

Physical and Chemical Analysis of Vistula Water
January 30 - 31 1973

Analysis / Sampling stations		1	2	3	4		4a	5	6	7	9
					I	II					
Date		1.30	1.30	1.31	1.31	1.31	1.31.	2.1	2.1	2.1	2,1
Hour		14^{10}	12^{30}	15^{25}	16^{00}	16^{00}	16^{45}	11^{15}	13^{00}	14^{15}	15^{40}
Temp. of air	°C	3	3	0	0	0	-2	1	-1	0	-3
Temp. of water	°C	0	0	0.1	1.9	1.4	0	0.4	0	0	0
Turbicidity	mg/l SiO_2	17	20	17	20	14	23	14	18	17	20
Colour	mg/l Pt	35	35	30	35	30	30	35	30	30	35
Conductance	/uS	900	940	865	845	850	850	875	735	795	840
Odor /cold/		2S	3S	2S	3S	3S	2S	1S	1S	1P	1S
pH		7.5	7.4	7.6	7.5	7.5	7.5	7.5	7.4	7.4	7.5
DO	mg/l O_2	8.0	8.5	8.5	8.6	8.5	8.8	8.3	8.3	9.2	9.3
Saturation	%	53	57	56	61	59	58	56	55	61	61
BOD_5	mg/l O_2	1.3	2.6	2.8	3.4	3.0	3.9	2.3	1.8	4.7	4.9
COD	mg/l O_2	26.6	27.6	22.3	-	22.8	25.4	25.2	15.7	19.0	24.7
NH_3 - N	mg/l	3.65	4.13	3.92	3.86	4.05	3.52	4.24	2.88	3.20	3.40
NO_2 - N	"	0.020	0.020	0.020	0.020	0.020	0.015	0.020	0.015	0.010	0.010
NO_3 - N	"	0.30	0.29	0.26	0.32	0.32	0.27	0.32	0.30	0.25	0.21
Organic N	"	2.69	3.78	3.21	3.16	2.64	2.88	2.62	2.40	2.67	2.43
Residue:											
Total	mg/l	593	675	593	602	607	636	596	499	521	544
Volatile	"	141	173	191	162	152	193	187	124	143	130
Fixed	"	452	502	402	440	455	443	409	375	378	414
Orthophosphate	mg/l PO_4	0.100	0.810	0.405	0.400	0.390	0.355	0.315	0.245	0.305	0.330
Total Phosphate	"	0.385	1.03	0.560	0.550	0.550	0.570	0.483	0,445	0.475	0,470
Phenols	mg/l	0.005	0.003		0.003	0.003	0.003	0.006	0.004	0.002	0.005

Enclosure 9

Physical and Chemical Analysis of Vistula Tributaries Water
January 30 - 31 1973

Sampling stations / Analysis		Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
		I	II	III	IV	V	VI	VII
Date		1.30	1.30	1.30	1.31.	1.30	1.30	2.1.
Hour		13^{30}	12^{15}	10^{40}	16^{00}	10^{05}	9^{15}	14^{40}
Temp. of air	°C	3	2	0	0	1	0.5	0
Temp. of water	°C	7.4	0	0	17.4	0	1.4	2.4
Turbicidity	mg/l SiO_2	21	20	21	14	23	14	76
Colour	mg/l Pt	35	30	15	30	20	25	35
Conduotanoe	/uS	1035	535	470	860	435	405	555
Odor /cold/		2P	5S/G	1P/S	2S	4S	2S	2S
pH		7.7	7.3	7.4	7.5	7.3	7.5	7.0
DO	mg/l O_2	9.8	1.4	1.5	8.0	5.7	10.5	9.7
Saturation	%	80	9	11	83	39	74	69
BOD_5	mg/l O_2	5.5	11	2.9	7.0	11	2.7	22
COD	mg/l O_2	27.3	17.7	12.8	16.7	24.8	17.6	58.5
NH_3 - N	mg/l	20.4	3.06	0.62	3.87	3.66	0.48	1.40
NO_2 - N	"	0.450	0.010	0.040	0.085	0.035	0.013	0.03(
NO_3 - N	"	2.6	0.08	3.4	0.35	0.18	0.49	0.34
Organic N	"	34.5	2.82	1.40	2.66	3.25	1.71	3.16
Residues:								
Total	mg/l	576	455	391	587	296	298	399
Volatile	"	160	230	128	444	119	83	100
Fixed	"	416	225	263	143	177	215	299
Orthophosphate	mg/l PO_4	0.215	0.315	0.045	0.415	0.095	0.035	0.35(
Total Phosphate	"	0.305	0.740	0.385	0.520	0.800	0.150	0.98(
Phonols	mg/l	0.006	0.003	0	-	0.002	0.002	0.01(

Enclosure 10

Physical and Chemical Analysis of Vistula Water
February 14 1973

Sampling stations / Analysis	3	4		4a	5	6	9
		l	m				
Date	2.14	2.14	2.14	2.14	2.14	2.14	2.14
Hour	11^{45}	12^{10}	12^{20}	13^{35}	15^{30}	16^{15}	17^{40}
Temp. of air °C	7	7	7	7	6	6	4
Temp. of water °C	0.5	2.1	1.5	2.4	1.9	1.4	1.4
Turbioidity mg/l SiO_2	55	55	50	55	30	30	46
Colour mg/l Pt	45	55	55	50	55	50	50
Conductance /uS	575	600	575	550	490	550	550
Odor /cold/	1P	1P	1P	1P	1P	1P	1P
pH	7.5	7.6	7.5	7.5	7.6	7.6	7.6
DO mg/l O_2	11.5	11.3	10.5	10.7	11.4	11.6	11.0
Saturation %	82	81	73	77	81	81	77
BOD_5 mg/l O_2	5.6	3.5	5.2	6.0	5.2	3.7	3.6
COD mg/l O_2	25.0	21.0	22.3	21.9	20.1	17.3	24.1
NH_3 - N mg/l	2.01	2.09	2.12	1.98	2.24	1.64	1.96
NO_2 - N "	0.013	0.010	0.007	0.010	0.007	0.007	0.005
NO_3 - N "	0.51	0.43	0.47	0.43	0.37	0.58	0.47
Organic N "	2.06	2.48	2.75	2.36	2.36	2.09	2.10
Residue:							
Total mg/l	452	455	442	432	438	368	417
Volatile "	164	152	153	150	157	137	100
Fixed "	288	303	289	282	281	231	317
Orthophosphate mg/l PO_4	0.215	0.190	0.220	0.200	0.200	0.205	0.230
Total Phosphate "	0.530	0.570	0.585	0.645	0.595	0.310	0.605
Phenols mg/l	0.003	0.005	0.004	0.004	0.004	0.070	0.004

Enclosure 11

Physical and Chemical Analysis of Vistula Tributaries Water
February 13 - 14 1973

Analysis \ Sampling stations		Zagoż-dżonka	Heated Water	Radomka	Pilica
		III	IV	V	VI
Date		2.13	2.14	2.13	2.13
Hour		10^{30}	13^{00}	9^{30}	8^{40}
Temp. of air	°C	2	7	2	1
Temp. of water	°C	1.4	16.4	1.4	1.4
Turbicidity	mg/l SiO_2	18	46	46	40
Colour	mg/l Pt	45	60	40	55
Conductance	/uS	390	575	340	290
Odor /cold/		1P	1P	2S	2S
pH		7.1	7.5	7.2	7.0
DO	mg/l O_2	10.0	9.2	9.5	10.8
Saturation	%	70	92	66	76
BOD_5	mg/l O_2	4.1	6.3	10	4.1
COD	mg/l O_2	16.4	19.6	30.9	27.3
NH_3 - N	mg/l	0.46	2.00	1.22	0.39
NO_2 - N	"	0.048	0.045	0.015	0.005
NO_3 - N	"	3.8	0.64	0.40	0.47
Organic N	"	2.09	2.33	2.15	1.72
Residue:					
Total	mg/l	327	444	281	258
Volatile	"	123	157	112	78
Fixed	"	204	287	169	180
Orthophosphate	mg/l PO_4	0.105	0.175	0.110	0.150
Total Phosphate	"	0.250	0.485	0.295	0.350
Phenols	mg/l	0.003	0.004	0.004	0.002

Enclosure 12

Physical and Chemical Analysis of Vistula Water
February 27 - 28 1973

Analysis / Sampling stations		1	2	3	4	4a	5	6	7	9
Date		2.27	2.27	2.28	2.28	2.28	2.28	2.28	2.28	2.28
Hour		12^{50}	16^{00}	11^{35}	11^{00}	16^{20}	17^{30}	19^{30}	19^{45}	21^{35}
Temp. of air	°C	-1.5	-1.5	1.5	1.5	0	-1.5	-1	-4	0
Temp. of water	°C	0.7	1.2	0.7	0.7	0	0	0	0	0
Turbicidity	mg/l SiO_2	194	200	123	151	126	143	143	129	123
Colour	mg/l Pt	50	50	45	60	55	70	70	60	60
Conductance	/uS	418	360	395	410	403	410	373	352	379
Odor /cold/		2P	1P	1P	1P	1P	1P	1P	2P	1P
pH		7.5	7.5	7.6	7.5	7.5	7.4	7.5	7.5	7.5
DO	mg/l O_2	11.1	10.9	11.8	11.7	10.7	11.9	12.3	12.6	12.4
Saturation	%	78	78	83	82	72	81	83	86	83
BOD_5	mg/l O_2	6.3	7.0	5.7	7.0	7.0	5.1	6.8	5.4	5.5
COD	mg/l O_2	30.9	40.6	37.3	41.0	40.1	42.8	62.0	36.9	37.8
NH_3 - N	mg/l	1.10	2.16	0.84	0.98	1.04	1.04	0.90	0.78	0.84
NO_2 - N	"	0.020	0.020	0.003	0.003	0.003	0.003	0.003	0.007	0.010
NO_3 - N	"	0.90	1.3	1.7	2.4	2.0	2.4	2.1	1.3	2.0
Organic N	"	3.06	3.86	1.67	1.90	1.97	1.73	2.22	1.62	1.48
Residue:										
Total	mg/l	461	452	432	450	441	447	444	395	414
Volatile	"	156	142	140	137	126	146	141	126	125
Fixed	"	305	310	292	313	315	301	303	269	289
Orthophosphate	mg/l PO_4	0.145	0.315	0.100	0.090	0.075	0.115	0.125	0.120	0.140
Total Phosphate	"	1.21	1.08	0.775	0.920	0.930	0.920	0.860	0.870	0.860
Phenols	mg/l	0.002	0.004	0.004	0.006	0.005	0.003	0.006	0.006	0.006

Enclosure 13

Physical and Chemical Analysis of Vistula Tributaries Water
February 27 - 28 1973

Analysis \ Sampling station		Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilic
		I	II	III	IV	V	VI
Date		2.27	2.27	2.27	2.28	2.27	2.27
Hour		15^{35}	16^{25}	10^{20}	10^{30}	9^{50}	9^{10}
Temp. of air	°C	-2	0	-0.5	1	-0.5	-1
Temp. of water	°C	7.7	0.2	0	15.2	0	0
Turbicidity	mg/l SiO_2	100	55	23	143	40	55
Colour	mg/l Pt	50	55	55	65	45	80
Conductance	/uS	579	368	360	405	390	255
Odor /cold/		1P	1P	2P	1P	1P	2P
pH		7.3	7.6	7.5	7.5	7.5	7.4
DO	mg/l O_2	9.7	10.1	10.6	10.3	9.8	12.1
Saturation	%	82	69	72	101	68	82
BOD_5	mg/l O_2	8.5	4.5	2.3	6.8	7.7	3.0
COD	mg/l O_2	27.8	29.6	21.9	32.8	42.8	28.2
NH_3 - N	mg/l	5.84	1.27	0.40	0.84	1.10	0.31
NO_2 - N	"	0.108	0.012	0.013	0.030	0.029	0.01
NO_3 - N	"	6.9	1.3	2.6	2.5	1.7	0.50
Organic N	"	12.9	1.90	2.51	1.23	2.51	1.56
Residue:							
Total	mg/l	481	344	308	404	336	224
Volatile	"	154	122	107	136	148	94
Fixed	"	327	222	201	268	188	130
Orthophosphate	mg/l PO_4	0.140	0.155	0.100	0.115	0.135	0.15
Total Phosphate	"	0.620	0.660	0.230	0.615	0.750	0.56
Phenols	mg/l	0.025	0.005	0.006	0.010	0.0[illegible]	0.00

Enclosure 14

Physical and Chemical Analysis of Vistula Water
March 20 - 21 1973

Sampling stations / Analysis		1	2	3			4			4a			5	6	7	8	9
				l	m	r	l	m	r	l	m	r					
Date		3.20	3.20		3.21			3.21			3.21		3.21	3.21	3.21	3.21	3.21
Hour		10^{50}	12^{50}	8^{25}	8^{15}	8^{00}	9^{20}	9^{00}	8^{50}	12^{45}	12^{30}	12^{20}	14^{15}	15^{15}	16^{00}	17^{00}	17^{30}
Temp. of air	^{o}C	6	4	3	3	3	3	3	3	4	4	3	3	3	6	7	6
Temp. of water	^{o}C	3.3	3.3	7.3	7.1	7.5	7.5	8.0	7.5	6.3	6.3	6.3	4.3	4.3	4.3	4.3	4.3
Turbicidity	mg/l SiO_2	15	12	13	14	12	15	13	15	14	17	15	23	2.	20	13	12
Colour	mg/l Pt	30	25	30	30	30	30	25	25	30	25	25	30	35	30	30	35
Conductance	/uS	625	650	590	590	580	600	590	580	560	600	590	580	500	520	510	530
Odor /cold/		1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P
pH		7.6	7.7	7.8	7.8	7.8	7.9	7.7	7.8	7.8	7.8	7.8	7.8	7.7	7.7	7.8	7.8
DO	mg/l O_2	10.8	10.9	10.6	10.6	12.3	11.0	10.6	11.2	10.7	11.5	11.2	10.5	10.8	11.6	7.1	8.4
Saturation	%	79	80	87	86	101	90	88	92	85	91	91	80	81	88	53	64
BOD_5	mg/l O_2	2.1	4.6	4.0	2.6	3.2	3.8	2.7	3.6	4.4	3.5	3.4	3.5	3.1	4.0	4.2	4.0
COD	mg/l O_2	15.7	10.3	17.6	13.7	14.2	14.2	13.7	25.4	18.0	16.6	16.2	19.1	23.5	21.5	22.5	24.5
NH_3 - N	mg/l	1.33	1.98	1.46	1.57	1.53	1.42	1.51	1.52	1.22	1.32	1.42	1.24	0.86	1.00	0.96	0.99
NO_2 - N	"	0.007	0.015	0.010	0.010	0.015	0.009	0.010	0.010	0.015	0.010	0.010	0.010	0.007	0.007	0.010	0.010
NO_3 - N	"	0.93	1.0	1.2	1.2	1.1	1.0	1.1	1.1	1.0	1.0	1.4	0.97	1.0	1.1	1.2	1.0
Organic N	"	5.17	5.47	3.38	3.70	3.47	3.69	4.40	3.40	3.20	3.12	4.48	2.85	2.33	1.68	2.33	1.68
Residue:																	
Total	mg/l	466	475	480	462	-	476	460	449	445	452	414	471	429	384	398	393
Volatile	"	156	128	169	156	-	230	152	161	120	150	146	164	138	124	126	-
Fixed	"	310	347	311	306	-	246	308	288	325	302	268	307	291	260	272	-
Orthophosphate	mg/l PO_4	0.275	-	0.200	0.230	0.245	0.280	0.255	0.255	0.225	-	0.285	0.325	0.140	0.160	0.165	0.160
Total Phosphate	"	0.330	-	0.405	0.455	-	0.330	0.385	0.685	0.445	0.405	0.550	0.360	0.390	0.385	0.375	-
Phenols	mg/l	0.003	0.004	0.003	0.004	0.003	0.003	0.004	0.003	0.005	0.004	0.003	0.003	0.002	0.003	0.004	0.003

Enclosure 15

Physical and Chemical Analysis of Vistula Tributaries Water
March 20 - 21 1973

Sampling stations / Analysis		Kurówka I	Wieprz II	Zagożdżonka III	Heated Water IV	Radomka V	Pilica VI	Jeziorka VII
Date		3.20	3.20	3.20	3.21	3.20	3.20	3.21
Hour		12^{30}	13^{30}	9^{25}	8^{40}	9^{00}	8^{30}	16^{10}
Temp. of air	°C	4	4	5	3	4	2	6
Temp. of water	°C	6.3	4.3	3.3	13.3	2.3	2.3	4.3
Turbicidity	mg/l SiO_2	11	10	10	18	23	15	15
Colour	mg/l Pt	30	40	40	30	45	40	40
Conduotanoe	/uS	710	460	390	600	430	340	490
Odor /cold/		1P	1P	1P	1P	2S	1P	2P
pH		7.4	7.8	7.6	7.8	7.5	7.8	7.7
DO	mg/l O_2	9.9	10.1	8.9	10.5	7.3	7.9	11.2
Saturation	%	77	76	65	99	52	57	84
BOD_5	mg/l O_2	2.1	4.0	2.7	4.9	9.7	2.2	4.6
COD	mg/l O_2	22.5	22.5	19.1	14.7	49.5	20.1	29.4
NH_3 - N	mg/l	9.66	0.52	0.34	1.30	1.07	0.30	0.37
NO_2 - N	"	0.150	0.020	0.030	0.035	0.040	0.010	0.033
NO_3 - N	"	3.6	0.70	2.6	1.0	0,68	0.88	2.0
Organic N	"	6.44	3.72	4.33	1.70	6.24	4.36	2.70
Residue:								
Total	mg/l	530	348	308	450	347	279	357
Volatile	"	207	123	101	146	114	84	144
Fixed	"	323	225	207	304	233	195	213
Orthophosphate	mg/l PO_4	0.250	0.305	0.215	0.185	0.165	0.205	0.265
Total Phosphate	"	0.495	0.505	0.335	0.455	0.705	0.335	0.370
Phenols	mg/l	0.008	0.006	0.005	0.004	0.007	0.003	0.007

Enclosure 16

Physical and Chemical Analysis of Vistula Water
April 24 - 25 1973

Sampling stations / Analysis		1	2	3			4			4a			5	6	7	8	9
				l	m	r	l	m	r	l	m	r					
Date		4.24	4.24	4.25			4.25			4.25			4.25	4.25	4.25	4.25	4.25
Hour		11^{00}	13^{20}	8^{30}	8^{40}	8^{50}	9^{10}	9^{20}	9^{30}	11^{15}	11^{25}	11^{35}	13^{15}	14^{15}	15^{15}	16^{15}	17^{00}
Temp. of air	°C	12	14	11	11	11	11	11	11	11	11	11	11	10	10	10	10
Temp. of water	°C	10.3	11.3	10.3	10.3	10.3	12.3	10.8	10.8	11.3	11.3	11.3	11.3	10.8	10.3	10.3	10.3
Turbicidity	mg/l SiO_2	20	23	21	23	17	23	24	21	20	21	20	15	14	23	21	23
Colour	mg/l Pt	20	20	20	15	20	15	20	15	20	20	15	20	20	20	20	20
Conductance	µS	510	490	455	455	460	453	465	453	445	460	354	440	425	430	435	425
Odor /cold/		3P	1P	2P	1P	2P	3P	3P	2P	3P	3P	3P	3P	1P	1P	2P	3P
pH		7.6	7.7	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.9	7.9	8.0	8.0	8.0
DO	mg/l O_2	9.2	9.0	10.2	9.9	9.8	9.8	9.7	10.1	10.0	8.8	9.2	10.6	11.9	10.8	11.2	11.0
Saturation	%	80	81	89	87	86	90	86	88	90	79	83	95	105	95	99	96
BOD_5	mg/l O_2	2.8	3.7	4.2	4.6	4.4	4.0	4.1	3.7	4.6	5.3	4.7	4.2	4.9	4.3	5.0	4.7
COD	mg/l O_2	19.4	14.8	16.5	17.0	18.4	14.1	12.1	15.1	17.9	24.7	17.9	16.0	15.0	13.6	22.5	22.8
NH_3 - N	mg/l	0.48	1.24	0.17	0.34	0.20	0.26	0.34	0.34	0.42	0.26	0.34	0.20	0.23	0.20	0.20	0.17
NO_2 - N	"	0.020	0.025	0.022	0.021	0.025	0.024	0.020	0.025	0.035	0.039	0.022	0.025	0.022	0.020	0.027	0.013
NO_3 - N	"	1.2	1.2	1.4	1.4	1.3	1.0	1.0	0.96	1.3	1.4	1.4	1.1	0.90	0.81	1.1	1.1
Organic N	"	1.16	1.66	1.48	1.64	2.08	1.96	1.98	2.13	1.68	1.60	2.07	1.06	0.92	1.32	1.32	1.18
Residue:																	
Total	mg/l	350	381	356	367	379	362	382	378	363	393	370	372	346	364	363	371
Volatile	"	110	118	132	126	201	120	142	148	130	122	132	164	122	126	130	168
Fixed	"	240	263	224	241	178	242	240	230	233	271	238	208	224	238	233	203
Orthophosphate	mg/l PO_4	0.120	0.330	0.145	0.095	0.120	0.115	0.105	0.185	0.140	0.155	0.145	0.100	0.105	0.140	0.090	0.115
Total Phosphate	"	0.390	0.505	0.370	0.315	0.370	0.330	0.363	0.390	0.400	0.370	0.435	0.355	0.400	-	0.390	0.310
Phenols	mg/l	0.002	0.003	0.003	0.003	0.002	0.003	0.003	0.003	0.003	0.002	0.003	0.004	0.004	0.004	0.004	0.004

Enclosure 17

Physical and Chemical Analysis of Vistula Tributaries Water
April 24 - 25 1973

Sampling stations / Analysis		Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
		I	II	III	IV	V	VI	VII
Date		4.24	4.24	4.24	4.25	4.24	4.24	4.25
Hour		13^{00}	13^{45}	9^{50}	9^{40}	9^{25}	8^{40}	15^{00}
Temp. of air	°C	13	15	12	11	11	11	10
Temp. of water	°C	18.8	13.3	12.3	20.3	12.3	11.8	12.3
Turbicidity	mg/l SiO_2	20	15	23	23	23	12	46
Colour	mg/l Pt	25	30	30	20	40	25	40
Conductance	/uS	600	430	415	440	360	370	440
Odor /cold/		2P	1P	3P	3P	2S	2P	3S
pH		7.6	7.9	7.7	7.5	7.6	7.9	6.9
DO	mg/l O_2	8.6	10.5	10.7	9.3	7.6	10.0	8.7
Saturation	%	90	98	99	101	70	90	79
BOD_5	mg/l O_2	6.8	2.4	2.8	3.5	4.8	1.6	-
COD	mg/l O_2	23.3	21.8	18.9	20.4	23.8	17.9	52.9
NH_3 - N	mg/l	14.9	0.30	0.54	0.30	1.96	0.37	0.62
NO_2 - N	"	0.300	0.030	0.043	0.042	0.025	0.008	0.070
NO_3 - N	"	5.6	0.63	2.8	1.1	0.38	0.36	0.68
Organic N	"	13.5	1.54	1.44	1.28	1.22	1.30	2.21
Residue:								
Total	mg/l	420	353	305	376	250	278	397
Volatile	"	160	114	108	156	115	106	150
Fixed	"	260	239	197	220	135	172	247
Ortophosphate	mg/l PO_4	0.135	0.185	0.105	0.150	0.115	0.090	0.355
Total Phosphate	"	0.540	0.570	0.485	0.305	0.325	0.755	0.950
Phenols	mg/l	0.010	0.004	0.003	0.003	0.004	0.004	0.014

Enclosure 18

Physical and Chemical Analysis of Vistula Water
May 23 - 25 1973

Sampling stations		1			2			3			4			4a		
Analysis		l	m	r	l	m	r	l	m	r	l	m	r	l	m	r
Date			5.23			5.23			5.24			5.24			5.24	
Hour		5^{00}	5^{00}	5^{00}	9^{30}	9^{30}	9^{30}	7^{40}	7^{40}	7^{40}	8^{45}	8^{45}	8^{45}	12^{30}	12^{30}	12^{30}
Temp. of air	°C	15	15	15	20	20	20	23	23	23	16	16	16	22	22	22
Temp. of water	°C	18.3	18.3	18.3	18.8	18.3	18.8	18.3	18.3	18.3	18.4	18.3	18.3	19.3	19.3	19.3
Turbicidity	mg/l SiO_2	23	17	20	23	26	23	23	26	20	23	26	20	23	23	26
Colour	mg/l Pt	25	25	25	25	25	25	25	25	25	25	25	25	30	30	30
Conductance	/uS	690	690	690	675	680	700	630	645	630	645	635	620	625	635	640
Odor /cold/		1P	1P	1P	2P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P
pH		8.2	8.2	8.1	8.5	8.4	8.3	8.2	8.1	8.2	8.2	8.2	8.3	8.6	8.6	8.6
DO	mg/l O_2	9.3	9.7	9.7	13.1	11.6	11.9	10.5	10.1	10.4	10.1	10.6	11.6	13.3	12.4	13.3
Saturation	%	99	103	103	142	123	129	112	108	111	108	113	124	144	134	144
BOD_5	mg/l O_2	5.1	5.8	5.5	8.7	9.1	9.9	7.1	7.6	7.7	7.5	7.6	8.5	9.6	10.4	10.6
COD	mg/l O_2	25.2	20.3	27.6	38.3	29.1	33.3	29.1	27.6	29.1	30.0	30.1	33.9	41.7	37.8	37.8
NH_3 - N	mg/l	0	0.14	0.20	0	0.14	0.30	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.26
NO_2 - N	"	0.050	0.064	0.064	0.052	0.023	0.112	0.045	0.044	0.030	0.045	0.041	0.043	0.050	0.043	0.038
NO_3 - N	"	0.68	0.70	0.88	0.69	0.71	0.92	0.85	1.0	1.1	1.1	0.28	1.0	1.1	0.43	1.3
Organic N	"	1.82	1.68	2.01	2.23	2.16	2.84	2.57	2.55	2.55	2.24	1.74	2.79	2.16	2.47	2.11
Residue:																
Total	mg/l	542	493	515	514	493	522	486	437	451	481	488	437	466	467	484
Volatile	"	48	68	56	63	77	56	41	86	80	108	100	81	65	100	94
Fixed	"	494	425	459	451	416	466	445	351	371	373	388	356	401	367	390
Orthophosphate	mg/l PO_4	0.195	0.175	0.160	0.195	0.150	0.230	0.280	0.220	0.160	0.185	0.205	0.250	0.150	0.160	0.160
Total Phosphate	"	0.310	0.350	0.350	0.310	0.345	0.350	0.330	0.375	0.355	0.330	0.405	0.365	0.385	0.390	0.375
Phenols	mg/l	0.004	0.003	0.003	0.003	0.004	0.003	0.016	0.013	0.013	0.013	0.020	0.017	0.006	0.015	0.007

Enclosure 18 (continued)

Sampling stations		5			6			9		
Analysis		l	m	r	l	m	r	l	m	r
Date			5.24			5.25			5.25	
Hour		19^{20}	19^{20}	19^{20}	3^{08}	3^{08}	3^{08}	13^{49}	13^{49}	13^{49}
Temp. of air	°C	20	20	20	17	17	17	24	24	24
Temp. of water	°C	17.3	17.3	17.3	13.3	13.3	13.3	18.3	18.3	18.3
Turbicidity	mg/l SiO_2	17	26	17	23	55	85	40	20	20
Colour	mg/l Pt	30	30	30	35	40	40	30	25	30
Conductance	/uS	580	580	580	550	485	500	550	550	550
Odor /cold/		2P	2P	2P	3P	1P	1P	2P	2P	2P
pH		7.9	7.9	8.0	7.8	7.8	7.6	8.6	8.6	8.6
DO	mg/l O_2	13.2	12.9	12.1	14.8	6.9	5.2	12.8	12.7	13.3
Saturation	%	138	135	127	143	66	50	136	135	142
BOD_5	mg/l O_2	10.2	10.1	8.4	14.6	6.7	7.2	9.4	9.4	9.2
COD	mg/l O_2	40.2	36.8	38.3	56.3	42.6	-	38.8	38.8	36.8
NH_3 - N	mg/l	0.26	0.26	0.20	0.74	0.88	0.72	0.20	0.14	0.10
NO_2 - N	"	0.034	0.030	0.028	0.021	0.013	0.017	0.003	0.002	0.001
NO_3 - N	"	0.85	0.86	0.93	0.33	0.12	0.13	0.41	0.45	0.53
Organic N	"	2.07	1.82	1.80	2.62	1.56	1.76	1.96	1.60	1.74
Residue:										
Total	mg/l	460	461	456	417	519	663	424	411	427
Volatile	"	96	79	78	44	36	112	67	70	80
Fixed	"	364	382	378	373	483	551	357	341	347
Orthophosphate	mg/l PO_4	0.100	0.110	0.145	0.370	0.125	0.140	0.350	0.250	0.050
Total Phosphate	"	0.430	0.369	0.385	0.665	0.485	0.730	0.420	0.335	0.345
Phenols	mg/l	0.007	0.005	0.005	0.004	0.006	0.007	0.005	0.006	0.007

Enclosure 19

Physical and Chemical Analysis of Vistula Tributaries Water

May 23 - 25 1973

Sampling stations / Analysis		Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
		I	II	III	IV	V	VI	VII
Date		5.23	5.23	5.24	5.24	5.24	5.24	5.25
Hour		6^{20}	15^{20}	7^{13}	7^{55}	8^{50}	21^{54}	8^{45}
Temp. of air	°C	17	23	17	17	18	17	
Temp. of water	°C	21.8	18.3	15.3	27.3	16.3	13.3	14.3
Turbicidity	mg/l SiO_2	26	36	23	23	55	30	85
Colour	mg/l Pt	30	35	40	30	45	40	90
Conductance	/uS	820	480	400	645	500	335	485
Odor /cold/		2S	1P/G	1S	1P	3S	1P	3P
pH		7.5	7.8	7.5	7.8	7.5	7.8	7.1
DO	mg/l O_2	5.8	7.9	6.0	8.2	3.9	8.4	4.2
Saturation	%	67	84	60	101	39	81	41
BOD_5	mg/l O_2	4.6	4.4	1.9	5.8	12.7	3.3	13.0
COD	mg/l O_2	31.5	30.5	20.3	36.8	37.3	36.8	84.4
NH_3 - N	mg/l	14.2	0.46	0.45	0.20	4.00	0.40	0.70
NO_2 - N	"	0.760	0.088	0.052	0.067	0.066	0.010	0.00
NO_3 - N	"	5.7	0.93	0.43	0.30	0.06	0.08	0.31
Organic N	"	18.5	1.66	1.14	1.74	2.77	1.64	2.42
Residue:								
Total	mg/l	562	368	302	456	349	261	402
Volatile	"	70	59	22	91	75	64	58
Fixed	"	492	309	280	365	274	197	344
Ortophosphate	mg/l PO_4	0.185	0.195	0.185	0.140	0.300	0.125	0.26
Total Phosphate	"	0.305	0.800	0.315	0.335	0.730	0.375	0.57
Phenols	mg/l	0.143	0.072	0.020	0.009	0.027	0.003	0.01

Enclosure 20

Physical and Chemical Analysis of Vistula Water
June 12 - 14 1973

Sampling stations / Analysis		1	2	3			4			4a			5	6	7	8	9
				l	m	r	l	m	r	l	m	r					
Date		6.12	6.12		6.13			6.13			6.13		6.13	6.13	6.13	6.14	6.14
Hour		15^{15}	16^{35}	13^{15}	13^{20}	13^{25}	13^{30}	13^{35}	14^{00}	15^{30}	15^{35}	16^{00}	17^{00}	18^{15}	19^{30}	11^{45}	12^{30}
Temp. of air	°C	23	23	26	26	26	26	26	26	26	26	26	24	23	22	19	21
Temp. of water	°C	19.5	19.5	20.0	20.2	20.2	21.9	20.5	19.1	21.1	20.9	20.8	21.2	21.2	21.0	20.6	20.6
Turbicidity	mg/l SiO_2	140	85	114	131	143	137	129	114	114	129	120	70	64	73	91	70
Colour	mg/l Pt	40	50	30	35	35	35	40	40	40	40	40	45	40	30	45	40
Conductance	/uS	500	460	493	510	535	520	510	480	490	485	480	485	460	460	475	470
Odor /cold/		3P	2P	2P	2P	2P	3P	2P	2P	2P	1P	1P	2P	2P	2P	1P	1P
pH		8.0	7.9	7.6	7.6	7.6	7.7	7.7	7.8	7.8	7.7	7.8	7.8	8.0	7.9	7.8	7.8
DO	mg/l O_2	6.7	6.6	7.0	7.0	7.5	7.3	7.1	7.3	8.1	7.4	7.7	7.3	8.4	7.9	8.2	8.3
Saturation	%	73	72	76	76	81	79	77	79	90	82	85	81	94	87	91	92
BOD_5	mg/l O_2	3.6	5.1	4.7	5.5	5.9	4.3	5.2	4.3	4.8	3.8	4.5	3.1	3.0	4.5	3.8	3.7
COD	mg/l O_2	30.1	22.3	30.9	32.5	37.6	33.0	32.9	27.1	31.0	31.0	33.5	21.9	27.6	31.0	27.6	25.2
NH_3 - N	mg/l	0.42	1.36	0.60	0.67	0.23	0.74	0.76	0.54	0.76	0.86	0.92	0.62	0.50	0.74	0.43	0.23
NO_2 - N	"	0.085	0.120	0.062	0.045	0.024	0.034	0.042	0.060	0.048	0.042	0.068	0.060	0.045	0.042	0.012	0.022
NO_3 - N	"	0.95	1.0	0.99	0.87	1.0	0.82	1.0	1.1	1.1	0.73	0.96	1.1	0.68	1.1	1.2	1.3
Organic N	"	2.70	2.63	2.63	2.76	2.58	1.56	1.74	1.52	2.44	2.10	2.84	1.72	2.05	3.78	1.70	2.16
Residue:																	
Total	mg/l	509	382	491	477	481	493	476	426	488	465	468	421	379	413	453	408
Volatile	"	151	102	128	119	132	129	126	124	159	146	110	134	130	96	139	146
Fixed	"	358	280	363	358	349	364	350	302	329	317	358	287	249	315	314	262
Orthophosphate	mg/l PO_4	0.220	0.280	0.235	0.200	0.205	0.050	0.195	0.140	0.260	0.215	0.225	0.070	0.140	0.125	0.160	0.125
Total Phosphate	"	0.675	0.550	0.595	0.720	0.675	0.670	0.720	0.635	0.765	0.800	0.775	0.570	0.485	0.615	0.705	0.685
Phenols	mg/l	0.009	0.009	0.029	0.018	0.005	0.011	0.027	0.022	0.036	0.031	0.031	0.028	0.012	0.013	0.034	0.034

Enlosure 21

Physical and Chemical Analysis of Vistula Tributaries Water
June 12 - 13 1973

Sampling stations / Analysis	Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
	I	II	III	IV	V	VI	VII
Date	6.12	6.12	6.12	6.13	6.12	6.12	6.13
Hour	16^{15}	17^{20}	14^{00}	11^{30}	13^{30}	13^{00}	20^{00}
Temp. of air °C	23	22	24	26	22	21	22
Temp. of water °C	22.0	21.0	19.5	28.8	21.0	20.0	21.0
Turbioidity mg/l SiO_2	17	17	12	100	40	40	43
Colour mg/l Pt	30	50	60	45	45	30	40
Conductance µS	630	450	410	500	450	370	520
Odor /cold/	2P	4P	1P	1P	2P	1P	3P
pH	8.0	8.1	7.8	7.7	7.9	8.0	7.4
DO mg/l O_2	6.1	6.3	6.2	7.8	4.1	9.0	5.1
Saturation %	69	70	68	100	45	98	56
BOD_5 mg/l O_2	8.8	5.5	1.9	2.9	7.9	4.1	7.2
COD mg/l O_2	27.1	31.5	31.0	29.1	47.5	34.9	44.6
NH_3 - N mg/l	12.7	0.54	0.60	0.67	3.11	0.34	0.50
NO_2 - N "	0.640	0.144	0.104	0.072	0.048	0.017	0.100
NO_3 - N "	3.9	0.57	2.7	1.1	0.20	0.23	0.70
Organic N "	22.9	2.39	3.99	1.89	2.79	2.42	3.63
Residue:							
Total mg/l	418	388	333	437	365	307	419
Volatile "	185	133	122	126	120	100	169
Fixed "	233	255	211	311	245	207	250
Orthophosphate mg/l PO_4	0.250	0.530	0.215	0.385	0.330	0.175	0.385
Total Phosphate "	0.550	0.910	0.325	0.530	0.700	0.345	1.35
Phenols mg/l	0.184	0.076	0.009	0.014	0.005	0.005	0.040

Enclosure 22

Physical and Chemical Analysis of Vistula Water
July 16 - 17 1973

Sampling stations / Analysis		1	2	3			4			4a			5			6	7	8	9
				l	m	r	l	m	r	l	m	r	l	m	r				
Date		7.16	7.16	7.17			7.17			7.17			7.17			7.17	7.17	7.17	7.17
Hour		11^{30}	13^{10}	8^{30}	8^{35}	8^{37}	8^{47}	8^{50}	8^{55}	9^{40}	9^{45}	9^{50}	14^{50}	14^{55}	15^{00}	16^{00}	17^{30}	19^{15}	20^{10}
Temp. of air	°C	26	28	28	28	28	28	28	28	28	28	28	28	28	28	28	27	26	23
Temp. of water	°C	22.0	23.0	21.9	21.6	21.6	22.8	21.8	22.2	23.2	22.5	22.4	23.2	22.6	23.2	24.3	24.5	24.3	24.4
Turbicidity	mg/l SiO_2	85	85	123	126	70	126	120	78	68	100	106	91	114	129	85	78	78	78
Colour	mg/l Pt	50	45	60	55	45	50	55	40	40	50	40	45	45	45	40	40	40	35
Conductance	/uS	550	535	530	520	515	535	520	520	530	520	520	525	525	515	515	525	525	520
Odor /cold/		1P	1P	1P	1P	1P	1P	1P	1P	1P	2P	1P	1P	2P	1P	1P	1P	1P	1P
pH		7.7	7.6	7.8	7.7	7.8	7.7	7.8	7.8	7.8	7.8	7.8	8.0	8.0	8.0	8.1	8.1	8.1	8.1
DO	mg/l O_2	6.9	6.4	7.3	6.7	6.9	7.4	6.7	7.8	7.1	6.7	6.2	6.5	6.3	5.4	6.3	8.8	8.5	6.4
Saturation	%	78	73	82	76	78	85	77	88	81	77	70	75	73	62	73	104	99	75
BOD_5	mg/l O_2	3.3	8.1	4.7	4.0	4.0	2.0	2.4	3.3	1.7	2.4	1.5	3.0	3.1	2.0	2.0	4.5	3.8	2.0
COD	mg/l O_2	25.2	25.7	35.1	25.2	30.1	23.7	23.2	22.2	21.7	23.7	19.8	45.0	29.1	25.7	27.7	28.2	26.7	27.2
NH_3 - N	mg/l	0.40	0.96	0.67	0.94	0.42	0.42	0.92	0.50	0.34	0.52	0.84	0.23	0.52	0.37	0.30	0.40	0.45	0.40
NO_2 - N	"	0.025	0.032	0.072	0.082	0.088	0.072	0.095	0.095	0.086	0.128	0.108	0.078	0.086	0.128	0.052	0.071	0.059	0.066
NO_3 - N	"	1.1	1.2	1.1	1.3	1.3	0.95	1.1	1.3	1.3	1.1	1.1	0.98	1.3	1.0	0.92	0.95	0.75	0.92
Organic N	"	1.46	2.68	1.36	1.54	1.74	1.70	2.18	1.44	1.74	1.50	1.54	1.34	1.74	1.78	1.52	1.30	1.44	1.48
Residue:																			
Total	mg/l	426	424	435	448	448	443	450	409	438	427	426	442	439	430	411	414	416	416
Volatile	"	145	152	144	136	149	149	144	133	132	149	150	150	151	144	146	139	136	135
Fixed	"	281	272	291	312	299	294	306	276	306	278	276	292	288	286	265	275	280	281
Orthophosphate	mg/l PO_4	0.445	0.530	0.530	0.390	0.625	0.445	0.280	0.445	0.265	0.280	0.550	0.350	0.445	0.285	0.350	0.455	0.385	0.470
Total Phosphate	"	1.17	0.660	0.650	0.845	0.840	0.625	0.845	0.560	0.790	0.870	0.705	0.705	0.845	0.645	0.790	0.665	0.570	0.770
Phenols	mg/l	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.003	0.002	0.003	0.002	0.003	0.003	0.003	0.003	0.003	0.004	0.003

Enclosure 23

Physical and Chemical Analysis of Vistula Tributaries Water
July 16 - 17 1973

Sampling stations / Analysis		Kurówka I	Wieprz II	Zagożdżonka III	Heated Water IV	Radomka V	Pilica VI	Jeziorka VII
Date		7.16	7.16	7.16	7.17	7.16	7.16	7.17
Hour		12^{30}	14^{00}	10^{05}	11^{50}	9^{30}	8^{30}	17^{50}
Temp. of air	°C	24	26	25	28	24.	23	27
Temp. of water	°C	26.3	24.0	22.5	29.0	21.8	22.1	25.5
Turbicidity	mg/l SiO_2	61	23	18	166	18	21	40
Colour	mg/l Pt	45	45	50	70	40	30	80
Conductance	/uS	660	500	540	525	575	450	605
Odor /cold/		3P/G	3P	2P	1P	3P	2P	4P/G
pH		7.3	7.8	7.3	7.8	7.5	8.1	6.6
DO	mg/l O_2	5.6	9.2	5.5	7.2	5.1	8.1	2.6
Saturation	%	68	108	64	93	58	92	32
BOD_5	mg/l O_2	11	6.8	5.5	2.5	5.6	4.1	11
COD	mg/l O_2	37.1	24.7	27.7	31.1	30.6	26.2	49.4
NH_3 - N	mg/l	12.1	0.45	0.54	0.54	4.34	0.40	1.04
NO_2 - N	"	0.560	0.042	0.018	0.080	0.043	0.010	0.512
NO_3 - N	"	3.5	0.80	2.5	0.94	0.25	0.28	0.15
Organic N	"	11.0	1.76	1.62	0.98	1.44	1.74	2.16
Residue:								
Total	mg/l	457	360	392	484	321	333	472
Volatile	"	167	146	151	138	107	104	144
Fixed	"	290	214	241	346	214	229	328
Orthophosphate	mg/l PO_4	0.281	0.515	0.330	0.355	0.570	0.300	0.785
Total Phosphate	"	0.540	0.860	0.430	0.750	0.600	0.595	1.17
Phenols	mg/l	-	0.004	0.004	0.004	0.009	0.003	0.012

Enclosure 24

Physical and Chemical Analysis of Vistula Water
August 7 - 9 1973

Sampling stations / Analysis		1	2	3			4			4a			5			6	7	8	9
				l	m	r	l	m	r	l	m	r	l	m	r				
Date		8.7	8.7	8.8			8.8			8.8			8.8			8.8	8.8	8.9	8.9
Hour		10^{45}	12^{30}	9^{30}	9^{35}	9^{40}	9^{30}	9^{55}	10^{00}	11^{20}	11^{30}	11^{40}	13^{30}	13^{35}	13^{40}	14^{30}	16^{45}	10^{40}	11^{00}
Temp. of air	°C	32	31	17	17	17	17	17	17	18	18	18	18	18	18	17	17	18	18
Temp. of water	°C	23.6	23.2	22.2	22.2	22.2	22.2	22.2	22.6	22.6	22.7	22.7	23.2	22.6	23.2	23.5	23.5	21.7	21.8
Turbicidity	mg/l SiO_2	61	55	64	64	50	38	61	35	52	55	55	66	70	85	50	58	64	61
Colour	mg/l Pt	40	25	25	30	35	30	35	40	35	30	30	40	35	35	35	30	30	30
Conductance	/uS	550	540	510	500	500	510	500	500	513	505	500	505	500	500	485	485	500	495
Odor /cold/		2P/S	2P/G	3P	1P	2P	1P	1P	2P	3P	2P	1P	1P	2P	2P	3P	3P	2P	3P
pH		7.9	8.3	8.6	8.5	8.5	8.2	8.4	8.5	8.5	8.5	8.6	8.8	8.8	8.8	8.8	8.9	8.9	8.9
DO	mg/l O_2	8.1	7.9	8.5	8.3	7.3	7.1	8.1	8.3	8.4	9.3	9.3	8.8	9.1	9.4	9.7	9.4	10.0	10.0
Saturation	%	94	90	96	93	84	80	92	95	96	107	106	101	104	108	111	109	113	113
BOD_5	mg/l O_2	4.2	7.3	5.1	4.4	4.5	2.8	6.1	5.6	5.0	5.2	5.1	4.9	4.3	5.6	4.8	4.2	4.3	4.4
COD	mg/l O_2	30.9	22.0	23.0	22.0	23.5	22.5	26.4	27.4	20.6	28.4	24.3	27.4	22.0	27.4	24.5	28.4	30.4	24.5
NH_3 - N	mg/l	0.14	0.78	0.34	0.20	0.14	0.20	0.50	0.46	0.40	0.40	0.40	0.50	0.46	0.56	0.40	0.50	0.54	0.48
NO_2 - N	"	0.019	0.043	0.001	0.003	0.022	0.009	0.019	0.034	0.012	0.022	0.017	0.001	0.007	0.012	0.009	0.001	0.003	0.003
NO_3 - N	"	0.91	1.1	0.83	1.1	0.88	0.88	0.74	0.83	0.83	1.0	0.99	0.86	0.93	0.90	0.81	0.70	0.66	0.71
Organic N	"	1.08	1.96	1.14	1.34	1.36	1.34	1.44	1.72	1.38	1.26	1.34	1.26	1.20	1.16	1.24	1.74	1.50	1.48
Residue:																			
Total	mg/l	416	403	406	410	384	408	410	394	415	407	396	415	411	479	394	395	396	397
Volatile	"	113	135	164	101	113	119	124	141	112	132	118	127	135	136	117	142	118	113
Fixed	"	303	268	242	309	271	289	286	253	303	275	278	288	276	343	277	253	278	282
Orthophosphate	mg/l PO_4	0.145	0.180	0.180	0.225	0.180	0.145	0.180	0.160	0.245	0.235	0.220	0.160	0.183	0.125	0.190	0.200	0.090	0.065
Total Phosphate	"	0.445	0.530	0.560	0.595	0.560	0.530	0.605	0.515	0.655	0.570	0.540	0.605	0.615	0.795	0.575	0.585	0.555	0.550
Phenols	mg/l	0.003	0.003	0.003	0.004	0.004	0.004	0.004	0.003	0.004	0.004	0.004	0.003	0.003	0.003	0.003	0.003	0.001	0.002

Enclosure 25

Physical and Chemical Analysis of Vistula Tributaries Water ..
August 7 - 8 1973

Sampling stations / Analysis		Kurówka I	Wieprz II	Zagożdżonka III	Heated Water IV	Radomka V	Pilica VI	Jeziorka VII
Date		8.7	8.7	8.7	8.8	8.7	8.7	8.8
Hour		12^{00}	13^{00}	9^{15}	8^{20}	9^{15}	8^{00}	16^{20}
Temp. of air	°C	32	31	32	17	31	31	17
Temp. of water	°C	28.2	25.5	23.0	31.4	22.7	23.5	22.5
Turbioidity	mg/l SiO_2	36	32	7	61	30	12	26
Colour	mg/l Pt	45	45	40	30	40	40	55
Conductance	/uS	700	465	540	510	450	375	550
Odor /cold/		2P	3S	2P	2P	2P/G	2P	3S
pH		8.1	8.5	8.0	8.5	8.1	8.5	7.0
DO	mg/l O_2	5.8	15.4	5.3	7.7	4.3	7.4	3.8
Saturation	%	73	184	61	101	50	85	43
BOD_5	mg/l O_2	10	11	1.2	3.3	7.2	4.5	15
COD	mg/l O_2	24.0	43.1	25.9	32.3	33.3	34.8	40.2
NH_3 - N	mg/l	14.8	0.34	0.54	0.62	2.37	0.50	0.80
NO_2 - N	"	0.600	0.012	0.068	0.002	0.043	0.000	0.068
NO_3 - N	"	3.8	0.12	1.4	0.59	0.13	0.05	0.33
Organic N	"	13.8	1.76	1.78	1.12	2.01	1.32	2.24
Residue:								
Total	mg/l	462	363	382	417	293	283	433
Volatile	"	179	133	127	132	112	109	127
Fixed	"	283	230	255	285	181	174	306
[illegible]phate	mg/l PO_4	0.145	0.075	0.070	0.190	0.275	0.080	0.730
Total Phosphate	"	0.470	1.22	0.255	0.505	1.53	0.605	1.03
Phenols	mg/l	0.003	0.006	0.003	0.003	0.004	0.002	0.006

Enclosure 26

Physical and Chemical Analysis of Vistula Water
August 21 - 22 1973

Sampling stations / Analysis	1	2	3			4			4a			5			6	7	8	9
			l	m	r	l	m	r	l	m	r	l	m	r				
Date	8.21	8.21	8.22			8.22			8.22			8.22			8.22	8.22	8.22	8.22
Hour	10^{30}	13^{25}	10^{05}	10^{10}	10^{15}	10^{30}	10^{35}	10^{40}	11^{35}	11^{40}	11^{45}	13^{05}	13^{10}	13^{15}	16^{00}	17^{25}	18^{05}	18^{30}
Temp. of air °C	20	20	19	20	20	21	21	21	21	21	21	21	21	21	19	19	18	18
Temp. of water °C	—	19.9	18.7	18.7	18.5	20.8	19.3	18.9	18.4	18.6	18.6	20.1	20.3	20.3	19.8	19.2	18.9	18.7
Turbicidity mg/l SiO_2	23	26	23	14	16	20	16	1[illegible]	32	17	17	16	12	16	23	21	13	30
Colour mg/l Pt	35	35	40	35	40	35	40	40	40	40	35	40	35	35	40	35	35	40
Conductance µS	780	750	690	700	680	690	680	650	675	670	660	650	640	625	580	580	580	580
Odor /cold/	1P	1P	1P	2P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	2P	1P	1P	1P
pH	7.6	8.5	8.0	7.5	7.9	7.9	8.3	8.2	7.5	8.3	7.8	8.3	8.2	8.0	8.1	8.5	8.1	8.4
DO mg/l O_2	8.4	8.1	9.9	9.5	9.6	8.0	9.4	9.4	9.7	10.4	10.3	10.9	10.6	10.6	10.8	11.2	10.9	8.9
Saturation %	—	88	105	102	102	98	100	100	102	107	107	118	115	115	117	121	116	94
BOD_5 mg/l O_2	7.1	7.5	8.1	7.7	7.5	6.4	7.8	8.1	8.1	8.1	8.9	9.8	9.0	7.8	7.9	9.8	9.8	6.7
COD mg/l O_2	23.3	18.6	26.9	27.9	25.1	27.0	25.1	26.5	30.7	31.6	27.9	34.4	28.8	29.7	33.3	31.1	29.8	32.1
NH_3 - N mg/l	0.23	0.99	0.34	0.29	0.28	0.42	0.29	0.29	0.36	0.48	0.31	0.28	0.26	0.29	0.26	0.30	0.18	0.26
NO_2 - N "	0.031	0.660	0.029	0.038	0.035	0.037	0.034	0.032	0.034	0.034	0.030	0.030	0.032	0.028	0.021	0.020	0.020	0.020
NO_3 - N "	0.32	0.95	0.77	0.83	0.87	0.87	0.99	0.80	0.87	0.82	0.90	0.78	0.58	0.65	0.56	0.56	0.58	0.46
Organic N "	1.60	1.66	1.39	1.70	1.46	1.42	1.23	1.21	1.63	1.20	1.30	1.54	1.15	1.23	1.37	1.15	1.18	1.23
Residue:																		
Total mg/l	407	522	528	528	494	522	515	497	410	458	445	483	489	468	457	443	434	456
Volatile "	107	147	151	152	119	135	150	147	146	160	143	147	141	143	140	130	123	165
Fixed "	300	375	377	376	375	387	365	350	264	298	302	336	348	325	317	313	311	291
Orthophosphate mg/l PO_4	0.142	0.215	0.090	0.100	0.088	0.115	0.103	0.102	0.122	0.142	0.125	0.072	0.082	0.080	0.140	0.145	0.105	0.065
Total Phosphate "	0.390	0.460	0.505	0.505	0.455	0.530	0.492	0.455	0.460	0.585	0.487	0.540	0.455	0.542	0.540	0.452	0.462	0.585
Phenols mg/l	0.004	0.004	0.003	0.003	0.003	0.003	0.003	0.004	0.003	0.003	0.003	0.002	0.003	0.004	0.002	0.002	0.002	0.002

Enclosure 27

Physical and Chemical Analysis of Vistula Tributaries Water
August 21 - 22 1973

Sampling stations		Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
Analysis		I	II	III	IV	V	VI	VII
Date		8.21	8.21	8.21	8.22	8.21	8.21	8.22
Hour		12^{45}	14^{00}	9^{35}	11^{00}	9^{10}	7^{55}	17^{10}
Temp. of air	°C	20	21	19	20	19	19	19
Temp of water	°C	24.1	19.8	18.4	28.7	18.9	19.6	20.5
Turbicidity	mg/l SiO_2	30	14	11	17	46	23	50
Colour	mg/l Pt	30	35	35	35	40	25	120
Conductance	/uS	800	490	590	700	460	450	520
Odor /cold/		2P	1P	3P	1P	1S	1P	1S
pH		8.0	8.5	8.0	8.3	8.1	8.6	6.9
DO	mg/l O_2	5.8	8.6	5.5	7.6	4.4	8.3	4.9
Saturation	%	69	93	57	98	47	90	54
BOD_5	mg/l O_2	5.1	4.0	2.5	6.7	5.4	4.0	15
COD	mg/l O_2	23.3	31.6	16.7	25.1	39.1	22.8	62.3
NH_3 - N	mg/l	16.1	0.41	0.41	0.17	3.62	0.32	0.85
NO_2 - N	"	0.560	0.052	0.036	0.020	0.026	0.003	0.376
NO_3 - N	"	5.7	0.68	2.9	0.86	0.08	0.14	0.10
Organic N	"	9.66	1.33	1.06	1.19	1.78	0.79	1.72
Residue:								
Total	mg/l	549	455	422	471	316	338	425
Volatile	"	184	163	152	171	105	88	118
Fixed	"	365	292	270	300	211	250	307
Orthophosphate	mg/l PO_4	0.265	-	0.250	0.160	0.930	-	0.470
Total Phosphate	"	0.626	1.08	0.265	0.412	2.42	0.522	1.19
Phenols	mg/l	0.007	0.003	0.002	0.003	0.004	0.002	0.010

Enclosure 28

Physical and Chemical Analysis of Vistula Water
September 3 - 6, 1973

Sampling stations	1			2			3			4			4a		
Analysis	l	m	r	l	m	r	l	m	r	l	m	r	l	m	r
Date		9.3			9.4			9.5			9.5			9.5	
Hour	18^{30}	18^{30}	18^{30}	8^{00}	8^{00}	8^{00}	4^{45}	4^{45}	4^{45}	6^{00}	6^{00}	6^{00}	10^{25}	10^{25}	10^{25}
Temp. of air °C	17	17	17	16	16	16	15	15	15	16	16	16	17	17	17
Temp. of water °C	18.7	18.5	18.7	17.8	18.0	18.0	18.0	17.5	17.0	19.5	18.0	18.0	21.0	20.0	21.0
Turbicidity mg/l SiO_2	23	23	23	23	23	26	30	32	26	30	30	26	36	40	30
Colour mg/l Pt	35	35	30	35	30	30	40	40	35	40	35	35	35	35	40
Conductance /uS	860	860	860	860	860	865	885	855	870	865	860	865	870	870	870
Odor /cold/	1P	1P	1P	1P	1P	2P	2P	1P	1P	1P	1P	2P	1P	1P	2P
pH	8.5	8.4	8.4	8.4	8.5	8.5	8.6	8.5	8.5	8.5	8.6	8.5	8.8	8.8	8.8
DO mg/l O_2	9.8	9.8	9.9	9.2	8.9	8.2	7.6	7.6	7.5	7.5	8.0	7.8	10.9	10.6	11.6
Saturation %	104	105	106	96	93	86	80	79	79	81	84	81	121	116	129
BOD_5 mg/l O_2	8.7	8.5	8.2	8.2	7.2	7.2	6.6	6.6	6.5	6.5	6.4	6.8	9.1	9.0	9.8
COD mg/l O_2	46.5	40.6	36.6	45.5	36.6	38.6	31.7	29.2	32.2	30.7	31.7	36.6	37.6	33.2	37.6
NH_3 - N mg/l	0.48	0.44	0.37	0.50	0.95	1.10	0.40	0.41	0.40	0.31	0.34	0.44	0.20	0.20	0.26
NO_2 - N "	0.054	0.034	0.038	0.056	0.086	0.092	0.084	0.076	0.088	0.076	0.092	0.092	0.092	0.084	0.088
NO_3 - N "	0.57	0.65	0.57	0.58	0.70	0.86	0.79	0.89	0.91	0.88	0.80	1.0	1.1	0.97	0.85
Organic N "	2.71	2.62	2.24	1.89	2.15	2.39	2.13	1.72	1.63	1.95	2.00	1.95	2.68	2.27	2.00
Residue:															
Total mg/l	696	706	680	696	665	684	652	650	644	664	653	646	655	664	636
Volatile "	211	212	194	202	202	199	209	218	207	216	211	207	211	211	226
Fixed "	485	494	486	494	363	485	443	432	437	448	442	439	444	453	410
Orthophosphate mg/l PO_4	0.025	0.065	0.080	0.040	0.050	0.060	0.080	0.080	0.070	0.050	0.080	0.060	0.040	0.030	0.035
Total Phosphate "	0.515	0.567	0.485	0.495	0.522	0.530	0.570	0.570	0.575	0.610	0.530	0.605	0.577	0.585	0.645
Phenols mg/l	0.007	0.005	0.007	0.013	0.007	0.009	0.005	0.004	0.005	0.005	0.004	0.004	0.005	0.005	0.005

Enclosure 28 (continued)

Sampling stations		5			6			7			8			9		
Analysis		l	m	r	l	m	r	l	m	r	l	m	r	l	m	r
Date			9.5			9.6			9.6			9.6			9.6	
Hour		17^{35}	17^{35}	17^{35}	1^{50}	1^{50}	1^{50}	8^{50}	8^{50}	8^{50}	12^{45}	12^{45}	12^{45}	14^{45}	14^{45}	14^{45}
Temp. of air	°C	18	18	18	13	13	13	20	20	20	24	24	24	25	25	25
Temp. of water	°C	18.0	18.0	18.0	15.5	16.0	16.0	21.0	20.0	21.0	21.0	21.0	21.0	21.8	21.8	21.0
Turbicidity	mg/l SiO_2	30	36	30	23	32	23	32	30	30	20	23	-	32	30	26
Colour	mg/l Pt	35	35	40	35	35	35	35	30	35	40	40	-	40	40	40
Conductance	/uS	835	845	850	775	780	790	825	820	825	830	830	-	810	800	815
Odor /cold/		1P	1P	1P	1P	1P	2P	3P	3P	3P	2P	1P	-	1P	1P	1P
pH		8.5	8.5	8.4	8.4	8.3	8.4	8.5	8.6	8.4	8.6	8.7	-	8.4	8.6	8.7
DO	mg/l O_2	10.6	10.5	10.7	8.4	8.6	8.7	9.1	9.0	8.2	10.4	9.4	10.2	10.4	10.7	10.5
Saturation	%	111	110	112	85	86	87	101	98	91	116	104	113	118	121	117
BOD_5	mg/l O_2	9.6	9.6	9.8	7.5	7.6	7.7	6.8	6.7	6.3	7.7	6.3	7.4	7.0	8.0	7.3
COD	mg/l O_2	36.6	49.5	42.6	35.6	45.5	57.4	35.6	39.6	36.6	36.6	37.6	37.1	37.1	33.7	40.6
NH_3 - N	mg/l	0.18	0.15	0.23	0.14	0.10	0.22	0.08	0.14	0.08	0.20	0.28	0.23	0.22	0.25	0.18
NO_2 - N	"	0.034	0.057	0.051	0.034	0.040	0.044	0.037	0.023	0.026	0.044	0.060	0.057	0.044	0.060	0.064
NO_3 - N	"	0.71	0.70	0.66	1.0	0.95	0.93	0.71	0.52	0.59	0.82	0.88	0.75	0.74	0.87	0.72
Organic N	"	1.96	2.07	2.33	1.72	1.93	1.75	1.66	1.69	1.69	1.81	1.92	1.81	1.84	1.88	1.33
Residue:																
Total	mg/l	622	647	637	591	604	569	583	574	590	563	586	537	560	552	564
Volatile	"	177	230	225	207	193	183	188	160	188	172	167	313	179	213	175
Fixed	"	445	417	412	384	411	386	395	414	402	391	419	224	381	339	389
Orthophosphate	mg/l PO_4	0.095	0.050	0.055	0.030	0.030	0.065	0.070	0.055	0.070	0.055	0.070	0.090	0.065	0.060	0.015
Total Phosphate	"	0.520	0.550	0.615	0.505	0.560	0.615	0.475	0.475	0.475	0.445	0.530	0.585	0.585	0.645	0.550
Phenols	mg/l	0.004	0.004	0.004	0.004	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.005	0.005

Enclosure 29

Physical and Chemical Analysis of Vistula Tributaries Water
September 3 - 6 1973

Sampling stations / Analysis		Kurówka I	Wieprz II	Zagożdżonka III	Heated Water IV	Radomka V	Pilica VI	Jezioro VII
Date		9.3	9.4	9.5	9.5	9.5	9.5	9.6
Hour		20^{50}	9^{10}	4^{00}	5^{00}	6^{30}	20^{20}	9^{50}
Temp. of air	°C	19	15	13	15	13	17	20
Temp. of water	°C	21.0	17,5	15.5	27.0	14.0	19.0	20.0
Turbioidity	mg/l SiO_2	23	14	12	32	73	17	78
Colour	mg/l Pt	35	35	35	30	80	25	120
Conductance	/uS	1000	470	580	885	730	445	550
Odor /cold/		1P	1P	3P	3P	3S	4P	4P/G
pH		7.7	8.4	8.0	8.5	8.0	8.8	7.6
DO	mg/l O_2	5.9	7.9	7.6	7.0	2.4	8.9	1.2
Saturation	%	66	83	76	86	22	95	13
BOD_5	mg/l O_2	9.7	1.8	1.0	9.6	5.7	3.6	28
COD	mg/l O_2	36.1	18.8	20.8	32.7	77.2	26.7	69.4
NH_3 - N	mg/l	17.6	0.53	0.23	0.40	6.11	0.05	0.68
NO_2 - N	"	0.580	0.038	0.038	0.092	0.001	0.005	0.08
NO_3 - N	"	3.6	1.1	3.5	0.57	0.12	0.08	0.21
Organic N	"	18.4	1.05	0.71	2.07	3.74	0.78	1.33
Residue:								
Total	mg/l	637	356	460	672	502	327	406
Volatile	"	243	150	156	234	162	112	152
Fixed	"	394	206	304	438	340	215	254
Orthophosphate	mg/l PO_4	0.070	0.830	0.065	0.035	0.930	0.040	0.77
Total Phosphate	"	0.460	1.14	0.205	0.665	5.70	0.515	1.33
Phenols	mg/l	0.094	0.006	0.004	0.005	0.017	0.003	0.01

Enclosure 30

Physical and Chemical Analysis of Vistula Water
October 23 - 24 1973

Sampling stations / Analysis		1	2	3	4	4a			5	6	7	8	9
						l	m	r					
Date		10.23	10.23	10.24	10.24		10.24		10.24	10.24	10.24	10.24	10.24
Hour		13^{00}	11^{35}	10^{25}	12^{00}	14^{40}	14^{30}	14^{20}	16^{10}	17^{20}	18^{25}	10^{30}	9^{20}
Temp. of air	^{o}C	6	5	2	3	3	3	3	3	3	-1	2	2
Temp. of water	^{o}C	5.6	5.6	6.0	8.5	6.2	6.7	6.6	6.0	5.2	5.0	4.1	5.1
Turbicidity	mg/l SiO_2	20	17	20	23	20	12	14	12	14	17	14	64
Colour	mg/l Pt	35	40	30	30	30	30	30	30	30	30	25	30
Conductance	µS	810	850	730	760	700	760	755	740	720	690	630	620
Odor /cold/		1P	1P	1P	1P	1P	1P	1P	1P	1P	2P	1P	1P
pH		7.5	7.7	7.8	7.8	7.8	7.9	7.9	7.8	7.9	7.9	7.4	7.5
DO	mg/l O_2	9.7	9.8	8.8	8.5	8.9	9.9	10.7	10.3	10.1	10.8	10.4	10.4
Saturation	%	77	78	70	73	71	81	88	82	79	84	79	81
BOD_5	mg/l O_2	3.7	3.8	5.4	4.4	6.2	4.6	3.8	5.1	3.3	2.6	4.1	3.0
COD	mg/l O_2	23.9	23.9	25.3	21.6	25.7	23.0	21.1	23.0	22.5	21.2	22.1	25.7
NH_3 - N	mg/l	1.30	2.30	1.33	1.32	1.38	1.24	1.27	1.25	1.10	0.88	0.79	0.83
NO_2 - N	"	0.024	0.048	0.054	0.064	0.050	0.046	0.050	0.063	0.042	0.045	0.040	0.048
NO_3 - N	"	0.58	0.59	0.64	0.50	0.38	0.57	0.41	0.47	0.36	0.31	0.15	0.15
Organic N	"	0.59	1.03	0.88	0.56	1.05	0.62	1.03	0.51	0.68	0.76	0.45	0.65
Residue:													
Total	mg/l	633	719	597	588	536	591	599	578	558	539	531	569
Volatile	"	156	233	102	150	147	151	145	163	152	158	137	148
Fixed	"	477	486	495	438	389	440	450	415	406	381	394	421
Orthophosphate	mg/l PO_4	0.255	0.400	0.230	0.230	0.225	0.220	0.215	0.250	0.195	0.175	0.185	0.185
Total Phosphate	"	0.312	0.462	0.470	0.363	0.322	0.400	0.430	0.470	0.462	0.405	0.415	0.565
Phenols	mg/l	0.007	0.006	0.010	0.007	0.018	0.006	0.007	0.018	0.018	0.013	0.046	0.032

Enclosure 31

Physical and Chemical Analysis of Vistula Tributaries Water

October 23 - 24 1973

Sampling stations / Analysis		Kurówka I	Wieprz II	Zagożdżonka III	Heated Water IV	Radomka V	Pilica VI	Jezioka VII
Date		10.23	10.23	10.23	10.24	10.23	10.23	10.24
Hour		12^{15}	11^{10}	9^{50}	11^{25}	9^{20}	8^{20}	18^{10}
Temp. of air	°C	6	7	3	2	3	3	0
Temp. of water	°C	12.6	5.4	4.6	17.4	4.6	4.5	5.0
Turbicidity	mg/l SiO_2	23	23	14	23	32	23	23
Colour	mg/l Pt	30	55	35	30	45	30	60
Conductance	/uS	970	430	500	740	185	390	445
Odor /cold/		1P	2S	1P	1P	1P	1P	2P
pH		7.8	7.7	7.6	7.8	7.9	7.8	7.5
DO	mg/l O_2	6.9	9.1	6.9	9.2	8.2	10.9	10.7
Saturation	%	64	71	54	93	64	84	83
BOD_5	mg/l O_2	2.2	3.5	-	5.3	4.9	2.4	-
COD	mg/l O_2	33.1	35.9	17.5	24.3	32.2	19.3	42.3
NH_3 - N	mg/l	19.1	1.02	0.33	0.99	1.57	0.20	0.40
NO_2 - N	"	0.420	0.007	0.048	0.089	0.013	0.007	0.03
NO_3 - N	"	7.0	0.39	5.9	0.78	0.19	0.36	0.34
Organic N	"	14.5	0.90	0.26	0.50	1.07	0.42	0.89
Residue:								
Total	mg/l	626	326	449	617	267	304	384
Volatile	"	163	116	149	232	105	91	116
Fixed	"	463	210	300	385	162	213	268
Orthophosphate	mg/l PO_4	0.385	0.400	-	0.215	0.245	-	0.345
Total Phosphate	"	0.455	0.625	0.230	0.445	0.800	0.260	0.910
Phenols	mg/l	0.256	0.006	0.068	0.064	0.006	0.004	0.008

Physical and Chemical Analysis of Vistula Water
November 6 - 7, 1973

Enclosure 32

Sampling stations / Analysis	1	2	3	4	4a			5			6	7	8	9
					l	m	r	l	m	r				
Date	11.6	11.6	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.8	11.8
Hour	12^{15}	13^{15}	9^{05}	10^{00}	12^{20}	12^{10}	12^{05}	14^{40}	14^{45}	14^{55}	16^{30}	17^{55}	9^{50}	10^{45}
Temp. of air °C	7	10	6	5	5	5	5	4	4	4	3	3	6	5
Temp. of water °C	3.0	3.2	3.1	6.6	5.2	3.5	3.8	4.8	5.1	5.1	4.2	4.0	4.7	4.8
Turbicidity mg/l SiO_2	23	23	10	10	12	20	17	14	14	17	14	12	17	23
Colour mg/l Pt	45	40	35	35	35	35	35	35	40	35	40	35	40	40
Conductance /u S	960	920	750	770	760	780	780	740	750	740	710	700	610	640
Odor /cold/	1 P	2 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	2 P	1 P	1 P	1 P
pH	7.5	7.7	7.7	7.7	7.8	7.6	7.9	7.8	7.9	7.9	7.9	7.8	7.6	7.5
DO mg/l O_2	10.2	10.0	10.4	9.9	10.2	10.8	10.9	8.9	9.1	9.6	9.8	11.2	11.1	11.1
Saturation %	76	74	76	82	79	82	83	69	71	75	74	95	87	87
BOD_5 mg/l O_2	4.8	4.4	4.4	4.9	4.2	4.5	5.6	5.7	3.7	4.1	5.6	4.3	5.8	4.5
COD "	26.5	30.1	23.4	21.6	22.0	23.4	28.3	26.5	23.4	26.1	27.4	39.2	23.4	24.3
NH_3 - N mg/l	3.14	3.78	2.65	2.68	2.68	2.68	2.68	2.54	2.58	2.62	2.12	1.92	2.00	2.06
NO_2 - N "	0.002	0.013	0.024	0.046	0.032	0.027	0.027	0.041	0.037	0.034	0.036	0.047	0.042	0.042
NO_3 - N "	0.36	0.47	0.64	0.56	0.53	0.53	0.45	0.72	0.62	0.63	0.69	0.64	0.34	0.40
Organic N "	0.87	1.25	0.97	0.69	0.63	0.72	0.87	0.72	0.87	0.72	0.75	0.89	0.52	0.80
Residue:														
Total "	628	626	586	591	590	586	588	526	547	583	569	554	535	542
Volatile "	141	158	166	183	166	169	174	167	170	166	159	167	149	162
Fixed "	487	468	420	408	424	417	414	419	377	417	410	387	386	380
Orthophosphate mg/l PO_4	0.080	0.285	0.255	0.285	0.255	0.255	0.250	0.260	0.250	0.255	0.250	0.215	0.220	0.220
Total Phosphate "	0.360	0.515	0.475	0.470	0.495	0.505	0.505	0.520	0.522	0.445	0.495	0.420	0.445	0.470
Phenols mg/l	0.005	0.005	0.005	0.005	0.005	0.006	0.005	0.005	0.006	0.005	0.005	0.003	0.003	0.003

Enclosure 33

Physical and Chemical Analysis of Vistula Tributaries Water
November 6 - 7, 1973

Sampling stations / Analysis		Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
		I	II	III	IV	V	VI	VII
Date		11.6	11.6	11.6	11.7	11.6	11.6	11.7
Hour		12^{45}	13^{40}	10^{30}	9^{15}	10^{00}	9^{15}	17^{35}
Temp. of air	°C	10	9	8	6	10	7	3
Temp. of water	°C	12.5	3.0	2.8	22.4	3.5	2.2	5.5
Turbicidity	mg/l SiO_2	23	23	23	12	32	23	20
Colour	mg/l Pt	50	60	35	35	40	35	60
Conductance	/u S	1100	500	535	750	410	450	470
Odor /cold/		1 P	2 S	1 P	1 P	1 P	1 P	2 P
pH		7.5	7.8	7.7	7.8	7.7	7.9	7.5
DO	mg/l O_2	6.4	10.1	9.4	7.6	9.4	12.8	8.7
Saturation	%	60	75	70	76	71	92	69
BOD_5	mg/l O_2	6.7	5.3	1.6	5.7	5.2	3.6	10
COD	"	32.4	32.4	14.8	27.0	32.4	15.3	42.3
NH_3 - N	mg/l	20.5	1.80	0.72	2.09	2.32	0.29	1.10
NO_2 - N	"	0.208	0.010	0.054	0.134	0.013	0.010	0.038
NO_3 - N	"	5.2	0.31	4.4	0.53	0.16	0.36	0.19
Organic N	"	16.6	0.90	0.30	0.85	1.47	0.52	1.11
Residue:								
Total	"	729	341	396	600	278	304	405
Volatile	"	221	119	128	176	95	81	131
Fixed	"	508	222	268	424	183	223	274
Orthophosphate	mg/l PO_4	0.117	0.265	0.115	0.095	0.115	0.095	0.365
Total Phosphate	"	0.445	0.720	0.305	0.585	1.03	0.275	1.04
Phenols	mg/ l	0.005	0.003	0.003	0.004	0.003	0.003	0.007

Physical and Chemical Analysis of Vistula Water
November 20 - 21, 1973

Enclosure 34

Sampling stations / Analysis	1	2	3			4			4a	5	6	7	8	9
			l	m	r	l	m	r						
Date	11.20	11.20	11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21
Hour	11^{45}	13^{05}	9^{00}	9^{12}	9^{20}	9^{37}	9^{43}	10^{00}	10^{50}	11^{50}	12^{25}	14^{30}	15^{20}	16^{00}
Temp. of air °C	3	3	1	1	1	1	1	1	3	4	4	3	2	1
Temp. of water °C	2.2	2.1	1.1	1.1	1.1	4.8	1.0	1.0	3.1	1.9	1.9	2.0	1.6	1.2
Turbicidity mg/l SiO_2	17	14	10	17	14	20	20	17	10	23	10	17	20	64
Colour mg/l Pt	45	40	40	45	45	45	45	45	45	50	50	40	45	55
Conductance /u S	800	800	725	725	725	725	725	725	675	680	675	650	660	675
Odor /cold/	2 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	2 P	1 P	1 P
pH	8.0	7.9	8.0	8.1	8.2	8.1	8.2	8.2	8.0	8.0	8.2	8.2	8.2	8.1
DO mg/l O_2	11.8	11.1	12.3	12.5	13.0	12.3	12.9	12.8	12.4	11.7	12.7	12.0	12.7	12.4
Saturation %	85	80	86	87	91	95	91	89	92	84	91	86	91	87
BOD_5 mg/l O_2	4.2	5.4	6.9	7.8	8.4	7.5	8.7	8.0	8 0	10.3	5.0	4.5	6.2	5.9
COD "	27.7	27.7	24.3	26.4	22.6	22.6	22.7	29.0	24.8	27.7	25.2	25.6	22.7	26.0
NH_3 - N mg/l	2.34	3.12	2.29	2.38	2.46	2.39	2.41	2.38	2.36	2.44	2.12	1.85	1.84	2.01
NO_2 - N "	0.024	0.030	0.042	0.036	0.034	0.058	0.030	0.030	0.052	0.037	0.038	0.033	0.032	0.047
NO_3 - N "	0.49	0.65	0.74	0.61	0.64	0.66	0.54	0.56	0.61	0.62	0.82	0.72	0.78	0.80
Organic N "	0.78	1.52	0.97	0.97	0.81	1.13	1.22	1.27	1.55	1.48	1.03	1.40	1.22	1.52
Residue:														
Total "	798	494	563	571	569	571	562	577	525	595	565	560	527	561
Volatile "	194	140	152	157	164	162	152	154	140	161	168	148	141	148
Fixed "	604	354	411	414	405	409	410	423	385	434	397	412	386	413
Orthophosphate mg/l PO_4	0.132	0.285	0.167	0.155	0.180	0.180	0.165	0.162	0.200	0.177	0.180	0.175	0.185	0.190
Total Phosphate "	0.547	0.372	0.447	0.450	0.505	0.470	0.522	0.467	0.685	0.742	0.462	0.522	0.445	0.522
Phenols mg/l	0.005	0.004	0.010	0.004	0.004	0.006	0.005	0.005	0.005	0.007	0.010	0.006	0.006	0.008

Physical and Chemical Analysis of Vistula Tributaries Water
November 20 - 21, 1973

Sampling stations / Analysis		Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
		I	II	III	IV	V	VI	VII
Date		11.20	11.20	11.20	11.21	11.20	11.20	11.21
Hour		12^{30}	13^{35}	10^{05}	8^{00}	9^{30}	8^{55}	14^{20}
Temp. of air	°C	3	4	3	1	3	3	3
Temp. of water	°C	7.4	2.0	2.3	18.2	2.4	1.9	3.0
Turbicidity	mg/l SiO_2	14	23	12	17	30	14	30
Colour	mg/l Pt	60	45	40	45	35	35	65
Conductance	/u S	870	425	455	700	340	355	450
Odor /cold/		1 P	1 S	1 P	1 P	1 P	1 P	1 S
pH		7.7	8.1	7.8	8.1	8.0	7.9	7.6
DO	mg/l O_2	7.6	11.5	14.1	9.9	13.5	12.4	9.2
Saturation	%	62	83	101	104	97	89	60
BOD_5	mg/l O_2	5.8	4.7	2.1	7.2	7.4	3.7	8.7
COD	"	26.9	24.8	16.8	21.0	36.9	20.6	39.4
NH_3 - N	mg/l	19.3	1.00	0.40	1.92	1.55	0.29	0.78
NO_2 - N	"	0.344	0.024	0.060	0.112	0.038	0.010	0.058
NO_3 - N	"	4.2	0.43	5.3	0.95	0.24	0.33	0.48
Organic N	"	17.0	0.84	0.46	1.58	0.72	0.44	0.92
Residue:								
Total	"	616	364	419	565	297	312	408
Volatile	"	200	127	141	144	78	85	131
Fixed	"	416	237	278	421	219	227	277
Orthophosphate	mg/l O_4	0.175	0.352	0.185	0.115	0.177	0.150	0.225
Total Phosphate	"	0.302	0.782	0.325	0.500	0.455	0.357	0.730
Phenols	mg/l	0.027	0.002	0.008	0.068	0.003	0.003	0.009

Physical and Chemical Analysis of Vistula Water
December 11 - 12, 1973

Enclosure 36

Sampling stations / Analysis	1	2	3			4			4a	5	6	7	8	9
			l	m	r	l	m	r						
Date	12.11	12.11	12.12	12.12	12.12	12.12	12.12	12.12	12.12	12.12	12.12	12.12	12.12	12.12
Hour	11^{15}	12^{30}	9^{50}	9^{50}	9^{50}	10^{10}	10^{10}	10^{10}	11^{50}	12^{50}	13^{40}	14^{30}	16^{00}	16^{30}
Temp. of air °C	-5	-3	0	0	0	0	0	0	3	3	3	3	3	3
Temp. of water °C	0	0	0	0	0	4.6	0.2	0	2.1	0	0	0	0	0
Turbicidity mg/l SiO_2	23	23	13	13	13	15	13	12	18	14	16	14	17	23
Colour mg/l Pt	45	45	35	40	45	45	45	45	45	45	40	45	50	50
Conductance /u S	850	880	750	750	760	790	780	740	725	750	725	790	790	825
Odor /cold/	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	2 P	2 P	1 P	1 P	1 P
pH	7.3	7.5	7.5	7.5	7.5	7.5	7.4	7.4	7.3	7.5	7.5	7.4	7.4	7.4
DO mg/l O_2	10.0	9.7	10.1	9.3	9.7	9.7	10.2	10.2	7.6	9.9	9.4	8.8	10.7	12.4
Saturation %	68	66	68	63	66	76	69	70	54	67	64	59	73	84
BOD_5 mg/l O_2	3.0	3.3	2.8	2.4	2.7	3.1	2.6	3.4	4.3	3.0	2.9	2.6	2.7	3.3
COD "	26.7	21.8	17.3	17.3	20.8	18.8	21.8	20.8	23.7	22.3	16.3	17.3	19.3	19.8
NH_3 - N mg/l	3.27	4.94	3.71	3.67	3.80	3.60	3.68	3.78	3.79	3.68	3.12	3.61	3.71	3.70
NO_2 - N "	0.012	0.022	0.018	0.018	0.017	0.050	0.016	0.018	0.046	0.038	0.027	0.022	0.020	0.027
NO_3 - N "	0.74	0.86	0.45	0.31	0.33	0.55	0.39	0.39	0.60	0.71	0.54	0.48	0.45	0.55
Organic N "	1.10	1.45	1.16	0.81	1.04	1.03	0.81	1.13	1.19	0.78	0.75	0.69	0.63	0.72
Residue:														
Total "	623	642	608	605	603	603	615	597	581	591	554	579	617	628
Volatile "	148	161	150	156	153	165	147	172	147	151	142	149	171	155
Fixed "	475	481	458	449	450	438	468	425	434	440	412	430	446	473
Orthophosphate mg/l PO_4	0.142	0.092	0.135	0.140	0.145	0.150	0.152	0.155	0.152	0.142	0.127	0.185	0.160	0.165
Total Phosphate "	0.203	0.243	0.225	0.213	0.275	0.325	0.257	0.300	0.322	0.450	0.225	0.232	0.287	0.280
Phenols mg/l	0.004	0.006	0.004	0.004	0.004	0.005	0.004	0.004	0.006	0.006	0.005	0.003	0.003	0.003

Physical and Chemical Analysis of Vistula Tributaries Water
December 11 - 12, 1973

Sampling stations / Analysis	Kurówka I	Wieprz II	Zagożdżonka III	Heated Water IV	Radomka V	Jeziorka VI
Date	12.11	12.11	12.11	12.12	12.11	12.12
Hour	12^{10}	13^{00}	9^{40}	10^{40}	9^{10}	14^{40}
Temp. of air ^{o}C	-3	-3	-5	0	-8	3
Temp. of water ^{o}C	4.8	0	0	19.4	0	2.0
Turbicidity mg/l SiO_2	23	23	14	12	23	23
Colour mg/l Pt	40	45	30	45	45	80
Conductance /u S	1100	560	470	760	450	510
Odor /cold/	1 P	5 G	1 P	2 P	1 S	1 P
pH	7.1	7.3	7.3	7.4	7.6	6.9
DO mg/l O_2	8.3	1.8	8.5	8.2	7.7	10.7
Saturation %	64	12	57	87	52	77
BOD_5 mg/l O_2	4.6	12	2.1	3.2	4.4	12
COD "	41.6	36.6	14.8	23.7	22.3	40.6
NH_3 - N "	18.6	2.27	0.68	3.64	3.22	1.22
NO_2 - N "	0.139	0.012	0.064	0.116	0.108	0.041
NO_3 - N "	6.9	0.08	4.7	0.67	0.25	0.67
Organic N "	21.0	1.22	0.66	0.90	1.00	1.16
Residue:						
Total "	754	380	387	590	318	435
Volatile "	258	133	141	163	106	147
Fixed "	496	247	246	427	212	288
Orthophosphate mg/l PO_4	0.157	0.325	0.127	0.147	0.105	0.385
Total Phosphate "	0.353	0.605	0.310	0.280	0.472	0.800
Phenols mg/l	0.028	0.003	0.002	0.024	0.010	0.004

Physical and Chemical Analysis of Vistula Water

January 2 - 3, 1974

Enclosure 38

Analysis \ Sampling stations	1	2	3	4	4a	5	6	7	8	9
Date	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Hour	12^{20}	13^{30}	9^{30}	9^{50}	10^{30}	11^{20}	12^{05}	12^{45}	13^{40}	14^{35}
Temp. of air °C	0	0	-3	-3	-1	0	0	1	1	1
Temp. of water °C	0.5	1.0	0	2.6	1.6	0.6	0.2	0	0	0
Turbicidity mg/l SiO_2	26	23	20	23	23	23	26	23	26	26
Colour mg/l Pt	40	45	35	40	40	40	40	45	40	40
Conductance µ S	610	560	550	600	510	535	465	470	435	465
Odor /cold/	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P
pH	7.2	7.3	7.2	7.5	7.6	7.6	7.7	7.7	7.6	7.5
DO mg/l O_2	12.1	11.8	12.9	12.5	11.5	11.9	13.7	13.2	13.4	13.1
Saturation %	85	82	88	82	83	83	93	90	91	89
BOD_5 mg/l O_2	3.4	3.3	3.2	2.3	2.1	4.0	2.8	2.7	4.2	3.0
COD "	27.5	25.7	38.9	25.7	19.9	28.5	26.6	25.2	25.2	46.5
NH_3 - N mg/l	1.84	2.37	1.72	1.76	1.76	1.66	1.14	1.22	1.16	1.16
NO_2 - N "	0.007	0.026	0.013	0.016	0.015	0.012	0.009	0.008	0.009	0.009
NO_3 - N "	0.99	1.2	1.1	0.99	0.91	1.0	0.80	0.79	0.81	0.80
Organic N "	0.78	1.29	0.82	0.68	0.78	0.94	0.65	0.55	0.59	0.59
Residue:										
Total "	464	460	442	443	431	438	378	389	372	392
Volatile "	116	121	109	110	108	112	109	93	128	114
Fixed "	348	339	333	333	323	326	269	296	244	278
Orthophosphate mg/l PO_4	0,070	0.180	0.120	0.082	0.072	0.107	0.105	0.112	0.105	0.117
Total Phosphate "	0.280	0.370	0.290	0.280	0.345	0.327	0.250	0.343	0.397	0.300
Phenols mg/l	0.004	0.003	0.003	0.004	0.004	0.005	0.004	0.003	0.003	0.004

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Physical and Chemical Analysis of Vistula Tributaries Water
January 2 - 3, 1974

Sampling stations / Analysis		Kurówka I	Wieprz II	Zagożdżonka III	Heated Water IV	Radomka V	Pilica VI	Jeziorka VII
Date		1.2	1.2	1.2	1.3	1.2	1.2	1.3
Hour		12 55	14 05	10 15	9 15	9 50	9 10	12 55
Temp. of air	°C	1	0	-2	-3	-2	-2	1
Temp. of water	°C	7.0	0.3	1.0	16.2	0.8	1.6	1.2
Turbicidity	mg/l SiO_2	26	23	20	20	26	23	23
Colour	mg/l Pt	45	55	45	35	45	45	45
Conductance	/u S	665	395	345	540	300	310	485
Odor /cold/		1 P	1 P	1 P	1 P	1 P	1 P	1 P
pH		7.0	7.5	7.4	7.6	7.5	7.7	7.7
DO	mg/l O_2	9.3	7.5	10.1	9.9	11.3	13.1	12.0
Saturation	%	76	51	70	99	79	94	84
BOD_5	mg/l O_2	5.0	3.1	1.1	5.0	6.2	2.4	5.1
COD	"	25.2	36.2	19.5	23.7	45.6	21.8	42.7
NH_3 - N	mg/l	17.0	0.90	0.46	1.64	1.22	0.29	0.82
NO_2 - N	"	0.465	0.013	0.018	0.038	0.015	0.003	0.020
NO_3 - N	"	5.5	0.30	1.7	1.0	0.28	0.47	1.4
Organic N	"	20.3	1.13	0.53	0.59	1.09	0.50	0.84
Residue:								
Total	"	527	335	307	455	276	289	448
Volatile	"	182	47	109	99	96	64	130
Fixed	"	345	288	198	356	180	225	318
Orthophosphate	mg/l PO_4	0.120	0.195	0.110	0.075	0.110	0.110	0.280
Total Phosphate	"	0.370	0.453	0.237	0.272	0.735	0.345	0.675
Phenols	mg/l	0.005	0.003	0.005	0.004	0.004	0.004	0.005

Physical and Chemical Analysis of Vistula Water — Enclosure 40

January 15 - 16, 1974

Analysis \ Sampling stations	1	2	3	4	4a	5	6	7	8	9
Date	1.15	1.15	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Hour	12^{40}	14^{25}	10^{15}	11^{30}	12^{15}	13^{05}	14^{00}	15^{40}	16^{30}	17^{30}
Temp. of air °C	-4	-2	3	4	4	4	4	2	2	1
Temp. of water °C	0	0.2	0.2	4.8	3.7	3.2	2.0	0.2	0.2	0.2
Turbicidity mg/l SiO_2	14	17	17	17	20	10	20	12	20	30
Colour mg/l Pt	40	40	40	45	40	35	35	35	40	45
Conductance /u S	880	880	760	750	740	710	675	675	825	690
Odor /cold/	1 P	2 P	1 P	1 G	1 P	2 P	1 P	1 P	2 P	1 P
pH	7.8	7.7	7.7	-	7.5	7.9	-	7.9	-	-
DO mg/l O_2	9.9	8.7	7.9	8.4	9.2	10.0	10.3	10.9	10.0	10.6
Saturation %	67	59	54	65	70	74	74	74	68	72
BOD_5 mg/l O_2	3.2	3.5	2.6	3.9	4.6	6.5	3.2	4.3	3.7	8.6
COD "	23.7	23.7	11.1	19.9	20.5	19.9	17.6	18.0	17.6	23.7
NH_3 - N mg/l	2.96	4.02	3.44	3.54	3.58	3.47	2.85	2.82	2.58	2.65
NO_2 - N "	0.015	0.046	0.027	0.042	0.034	0.029	0.018	0.022	0.021	0.023
NO_3 - N "	0.70	1.0	0.97	0.95	0.83	0.81	0.81	0.92	0.95	0.79
Organic N "	1.13	1.76	2.26	1.76	1.26	1.99	1.48	1.55	1.45	1.89
Residue:										
Total "	647	651	591	597	574	554	521	523	520	558
Volatile "	166	194	175	204	183	169	150	150	146	156
Fixed "	481	457	416	393	391	385	371	373	374	402
Orthophosphate mg/l PO_4	0.155	0.125	0.137	0.102	0.157	0.152	0.100	0.115	0.112	0.150
Total Phosphate "	0.247	0.283	0.305	0.403	0.373	0.423	0.305	0.257	0.320	0.415
Phenols mg/l	0.004	0.004	0.004	0.004	0.005	0.005	0.004	0.005	0.003	0.003

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Physical and Chemical Analysis of Vistula Tributaries Water
January 15 - 16, 1974

Sampling stations	Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
Analysis	I	II	III	IV	V	VI	VII
Date	1.15	1.15	1.15	1.16	1.15	1.15	1.16
Hour	14^{10}	14^{55}	11^{00}	10^{00}	10^{30}	9^{50}	16^{50}
Temp. of air °C	-3	-2	-6	3	-6	-8	2
Temp. of water °C	6.4	0.8	0	16.4	0	0	1.8
Turbicidity mg/l SiO_2	23	17	20	14	17	12	40
Colour mg/l Pt	45	50	20	35	35	35	60
Conductance /u S	1050	500	550	750	470	460	510
Odor /cold/	1 P	3 S/G	1 P	2 P	1 S	1 P	1 S
pH	7.4	7.6	7.5	7.7	7.4	7.5	7.3
DO mg/l O_2	7.4	3.1	7.3	8.6	5.2	10.7	9.1
Saturation %	59	21	49	86	36	73	65
BOD_5 mg/l O_2	12	7.8	2.1	7.3	7.1	2.3	16
COD "	25.2	26.1	11.9	28.5	16.6	19.0	41.8
NH_3 - N mg/l	23.6	1.84	1. 00	3.37	3.77	0.42	1.39
NO_2 - N "	1.53	0.017	0.056	0.099	0.030	0.017	0.048
NO_3 - N "	6.1	0.16	6.8	1.0	0.16	0.51	0.56
Organic N "	25.3	1.49	1.32	1.49	1.15	0.87	1.35
Residue:							
Total "	759	391	467	590	329	352	430
Volatile "	291	149	194	175	119	94	129
Fixed "	468	242	273	415	210	258	301
Orthophosphate mg/l PO_4	0.185	0.238	0.095	0.185	0.180	0.115	0.190
Total Phosphate "	0.497	0.473	0.260	0.330	0.400	0.130	0.775
Phenols mg/l	0.010	0.003	0.004	0.010	0.004	0.003	0.007

Physical and Chemical Analysis of Vistula Water
February 5 - 6, 1974

Enclosure 42

Sampling stations / Analysis	1	2	3			4			4a	5	6	7	8	9
			l	m	r	l	m	r						
Date	2.5	2.5	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
Hour	11^{10}	12^{25}	9^{00}	9^{10}	9^{15}	9^{50}	9^{40}	9^{35}	10^{45}	11^{50}	12^{35}	13^{25}	15^{00}	15^{45}
Temp. of air °C	1	2	2	2	2	2	2	2	4	4	6	5	5	5
Temp. of water °C	2.5	2.4	2.5	2.8	2.6	4.2	2.4	2.6	3.4	3.4	2.8	2.2	2.6	2.6
Turbicidity mg/l SiO_2	23	23	23	23	23	23	23	23	23	23	23	23	23	23
Colour mg/l Pt	40	45	45	45	45	45	45	45	45	45	50	45	50	50
Conductance /u S	590	590	550	560	550	550	540	550	510	500	455	455	455	435
Odor /cold/	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P
pH	7.7	7.9	8.0	8.4	7.9	7.9	7.9	7.8	7.9	7.8	7.9	7.9	7.9	8.2
DO mg/l O_2	10.8	11.4	11.0	11.1	10.8	11.2	10.5	10.7	10.4	10.8	11.4	11.4	11.5	11.1
Saturation %	80	82	81	82	80	85	75	79	77	80	84	82	85	82
BOD_5 mg/l O_2	3.2	3.4	3.7	3.9	4.1	3.9	3.7	3.4	4.6	4.8	3.1	3.6	3.8	3.2
COD "	24.8	19.7	26.7	21.1	16.5	14.3	18.4	13.3	19.7	17.5	6.4	12.9	15.1	11.7
NH_3- N mg/l	1.88	2.62	1.96	2.12	2.02	2.07	2.09	2.12	2.05	2.06	1.52	1.46	1.42	1.43
NO_2- N "	0.008	0.017	0.016	0.017	0.016	0.020	0.017	0.017	0.022	0.020	0.016	0.017	0.016	0.018
NO_3- N "	0.90	1.1	1.0	0.84	0.96	0.72	0.70	0.70	0.70	0.68	0.78	0.89	0.91	0.90
Organic N "	0.76	1.52	1.03	1.07	0.95	1.38	0.94	1.07	1.08	1.10	0.76	0.94	0.93	0.59
Residue:														
Total "	478	474	468	470	438	455	451	464	416	448	390	369	379	405
Volatile "	145	148	139	135	143	163	164	138	161	141	133	141	146	139
Fixed "	333	326	329	335	295	292	287	326	255	307	257	228	233	266
Orthophosphate mg/l PO_4	0.097	0.165	0.147	0.160	0.175	0.140	0.152	0.150	0.130	0.140	0.130	0.130	0.147	0.157
Total Phosphate "	0.327	0.350	0.335	0.377	0.362	0.377	0.535	0.430	0.550	0.410	0.342	0.385	0.442	0.437
Phenols mg/l	0.003	0.004	0.003	0.003	0.002	0.002	0.002	0.003	0.003	0.002	0.003	0.003	0.003	0.003

Physical and Chemical Analysis of Vistula Tributaries Water

February 5 - 6, 1974

Sampling stations / Analysis		Kurówka	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
		I	III	IV	V	VI	VII
Date		2.5	2.5	2.6	2.5	2.5	2.6
Hour		12^{00}	9^{35}	10^{10}	9^{15}	8^{40}	13^{35}
Temp. of air	°C	2	1	2	1	1	5
Temp. of water	°C	9.1	1.6	14.1	2.0	2.0	2.6
Turbicidity	mg/l SiO_2	23	23	23	23	23	32
Colour	mg/l Pt	50	30	50	35	45	70
Conductance	/u S	650	460	550	340	300	405
Odor /cold/		1 P	1 P	1 P	1 P	1 P	1 P
pH		7.8	7.3	7.9	7.4	7.9	7.4
DO	mg/l O_2	9.2	9.0	9.7	10.0	11.9	11.0
Saturation	%	79	65	85	72	86	81
BOD_5	mg/l O_2	7.4	2.1	4.2	4.2	2.3	6.0
COD	"	25.8	17.9	20.7	27.1	16.5	30.3
NH_3 - N	mg/l	12.0	0.71	1.88	1.58	0.38	0.84
NO_2 - N	"	0.240	0.039	0.059	0.013	0.008	0.035
NO_3 - N	"	4.9	5.1	0.80	0.45	0.91	1.7
Organic N	"	13.4	0.96	1.05	1.21	0.78	1.52
Residue:							
Total	"	507	410	467	279	268	409
Volatile	"	200	160	142	110	97	144
Fixed	"	307	250	325	169	171	265
Orthophosphate	mg/l PO_4	0.175	0.110	0.160	0.117	0.140	0.215
Total Phosphate	"	0.422	0.240	0.415	0.670	0.440	0.432
Phenols	mg/l	0 004	0 003	0 004	0 002	0 002	0 004

Physical and Chemical Analysis of Vistula Water
February 19 - 21, 1974

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Analysis \ Sampling stations		1	2	3	4	4a	5	6	7	8	9
Date		2.19	2.19	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21
Hour		12^{05}	13^{20}	9^{45}	10^{25}	11^{00}	12^{00}	12^{50}	13^{40}	14^{50}	15^{30}
Temp. of air	°C	7	6	5	5	5	7	7	7	7	7
Temp. of water	°C	6.0	5.5	4.8	6.4	5.0	4.8	4.6	4.2	4.2	4.2
Turbicidity	mg/l SiO_2	23	23	23	23	23	23	23	23	23	23
Colour	mg/l Pt	35	40	35	35	30	40	45	30	35	30
Conductance	/u S	510	500	490	480	490	470	430	430	450	450
Odor /cold/		1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P
pH		7.5	7.8	7.6	7.8	7.9	7.9	7.9	8.0	8.0	8.0
DO	mg/l O_2	9.9	10.5	10.9	10.4	10.4	10.7	11.3	11.2	11.3	11.2
Saturation	%	79	84	85	83	81	83	88	85	86	85
BOD_5	mg/l O_2	2.8	4.9	3.0	5.2	5.3	4.4	4.2	4.0	3.9	4.3
COD	"	16.8	18.2	18.2	20.0	20.0	14.6	20.9	19.1	25.0	19.5
NH_3- N	mg/l	1.22	1.72	1.08	1.10	1.27	1.16	0.89	0.94	0.90	0.90
NO_2- N	"	0.006	0.022	0.011	0.013	0.011	0.012	0.012	0.010	0.014	0.015
NO_3- N	"	1.1	1.3	1.2	1.2	1.0	0.96	0.96	1.1	1.2	1.2
Organic N	"	1.32	1.55	0.96	0.89	1.04	1.12	0.84	1.00	0.96	1.03
Residue:											
Total	"	391	471	395	393	388	382	356	355	367	362
Volatile	"	106	111	115	109	107	110	107	118	109	114
Fixed	"	285	360	280	284	281	272	249	237	258	248
Orthophosphate	mg/l PO_4	0.060	0.192	0.220	0.222	0.245	0.240	0.272	0.222	0.270	0.280
Total Phosphate	"	0.222	0.370	0.282	0.400	0.385	0.372	0.370	0.430	0.300	0.400
Phenols	mg/l	0.003	0.003	0.003	0.004	0.004	0.004	0.003	0.003	0.004	0.005

Physical and Chemical Analysis of Vistula Tributaries Water

February 19 - 21, 1974

Sampling stations / Analysis		Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
		I	II	III	IV	V	VI	VII
Date		2.19	2.19	2.19	2.21	2.19	2.19	2.21
Hour		13^{00}	14^{00}	10^{25}	9^{15}	10^{05}	9^{30}	13^{50}
Temp. of air	°C	6	6	8	4	5	5	7
Temp. of water	°C	10.0	5.0	5.5	16.0	5.5	5.0	3.4
Turbicidity	mg/l SiO_2	23	23	23	23	23	23	36
Colour	mg/l Pt	45	50	30	35	45	50	45
Conductance	/u S	640	440	470	500	400	350	460
Odor /cold/		2 P	1 P	1 P	1 P	1 P	1 P	1 G
pH		7.7	7.9	7.6	7.9	7.8	7.9	7.4
DO	mg/l O_2	8.4	8.9	8.0	9.5	9.3	10.9	11.1
Saturation	%	74	69	64	95	74	85	82
BOD_5	mg/l O_2	7.4	4.2	1.9	3.8	4.6	2.4	5.3
COD	"	24.6	28.2	18.2	25.0	28.2	20.0	40.0
NH_3 - N	mg/l	11.2	0.89	0.64	1.06	1.25	0.38	0.66
NO_2 - N	"	0.340	0.016	0.051	0.033	0.028	0.007	0.050
NO_3 - N	"	4.6	0.38	4.5	1.2	0.61	0.94	2.1
Organic N	"	10.1	1.55	1.00	1.00	1.29	0.81	1.48
Residue:								
Total	"	470	356	392	391	269	270	427
Volatile	"	156	128	123	122	106	77	150
Fixed	"	314	228	269	269	163	93	277
Orthophosphate	mg/l PO_4	0.105	0.165	0.095	0.315	0.105	0.105	0.400
Total Phosphate	"	0.402	0.665	0.372	0.372	0.730	0.280	0.575
Phenols	mg/l	0.007	0.004	0.004	0.004	0.004	0.003	0.005

Physical and Chemical Analysis of Vistula Water — Enclosure 46

March 5 - 6, 1974

Sampling stations / Analysis	1	2	3			4			4a	5	6	7	8	9
			l	m	r	l	m	r						
Date	3.5	3.5	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Hour	11^{10}	12^{40}	8^{55}	9^{00}	9^{04}	9^{15}	9^{20}	9^{25}	10^{15}	11^{25}	12^{10}	12^{55}	14^{30}	15^{00}
Temp. of air °C	3	3	1	1	1	1	1	1	2	3	3	4	4	4
Temp. of water °C	1.8	2.0	2.0	1.8	1.4	4.8	2.2	1.4	3.4	3.0	2.2	2.0	2.2	2.2
Colour mg/l Pt	40	40	35	40	40	35	35	40	45	40	35	40	35	30
Conductance /u S	590	590	580	560	560	560	570	570	550	560	500	520	540	530
Odor /cold/	1 PG	1 PG	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P
pH	8.0	8.4	8.2	8.2	8.2	8.1	8.2	8.1	8.1	8.0	8.2	8.2	8.0	8.1
DO mg/l O_2	11.5	11.8	11.7	12.2	12.3	10.8	12.5	12.5	11.3	11.9	11.9	12.5	12.3	12.3
Saturation %	83	85	84	88	86	84	89	87	80	88	85	90	88	88
BOD_5 mg/l O_2	2.1	3.0	2.2	3.9	3.5	2.0	3.0	2.2	4.4	3.4	4.0	3.8	3.9	3.3
COD "	17.1	17.1	15.7	22.9	17.5	18.5	23.4	27.0	27.9	26.1	20.7	19.3	19.3	27.0
NH_3 - N mg/l	1.54	2.10	1.73	1.70	1.70	1.60	1.75	1.73	1.76	1.61	1.22	1.22	1.28	1.24
NO_2 - N "	0.017	0.021	0.006	0.007	0.007	0.032	0.010	0.009	0.016	0.014	0.013	0.012	0.012	0.012
NO_3 - N "	0.91	1.0	0.81	0.89	0.85	0.36	0.96	1.0	0.88	0.88	0.80	0.87	0.92	0.90
Organic N- "	1.35	2.18	1.25	1.38	1.65	1.08	0.94	1.23	1.34	1.12	1.15	1.26	1.00	1.19
Residue:														
Total "	427	412	412	419	422	418	420	416	431	415	393	393	406	398
Volatile "	135	110	166	194	115	135	132	127	127	115	120	114	126	150
Fixed "	292	302	246	225	307	283	288	289	304	300	273	279	280	248
Orthophosphate mg/l PO_4	0.122	0.235	0.142	0.210	0.185	0.165	0.147	0.205	0.185	0.160	0.142	0.140	0.152	0.155
Total Phosphate "	0.500	0.402	0.380	0.510	0.355	0.357	0.392	0.342	0.422	0.670	0.277	0.305	0.342	0.472
Phenols mg/l	0.005	0.005	0.005	0.006	0.006	0.005	0.004	0.004	0.004	0.002	0.003	0.003	0.003	0.003

Enclosure 47

Physical and Chemical Analysis of Vistula Tributaries Water
March 5 - 6, 1974

Sampling stations / Analysis	Kurówka I	Wieprz II	Zagożdżonka III	Heatod Water IV	Radomka V	Pilica VI	Joziorka VII
Date	3.5	3.5	3.5	3.6	3.5	3.5	3.6
Hour	12^{05}	13^{25}	9^{20}	8^{45}	9^{00}	8^{25}	13^{05}
Temp. of air °C	3	3	2	1	2	3	4
Temp. of water °C	8.4	2.0	2.2	16.2	2.0	1.8	4.0
Colour mg/l Pt	45	60	35	35	40	35	50
Conductance /u S	680	480	500	570	380	360	540
Odor /cold/	1 P	3 S	1 P	1 P	1 S	1 P	2 S
pH	8,4	8.5	8.4	8.1	8.3	8.1	6.7
DO mg/l O_2	10.0	10.0	10.7	9.6	10.2	12.3	10.7
Saturation %	77	72	77	96	73	88	81
BOD_5 mg/l O_2	9.5	5.0	2.7	5.3	6.2	2.4	9.0
COD "	24.3	27.0	31.5	18.5	41.4	17.1	41.4
NH_3 - N mg/l	10.1	1.52	0.74	1.37	2.13	0.30	1.12
NO_2 - N "	0.360	0.016	0.046	0.050	0.017	0.012	0.029
NO - N "	5.0	0.37	5.7	0.93	0.41	0.88	1.1
nic N "	12.8	1.70	1.50	1.03	1.71	1.36	1.47
Residue:							
Total mg/l	451	366	417	427	291	275	472
Volatile "	167	131	137	149	115	121	140
Fixed "	284	235	280	278	176	154	332
Orthophosphate mg/l PO_4	0.195	0.280	0.157	0.125	0.192	0.165	0.265
Total Phosphate "	0.370	0.711	0.347	0.440	0.590	0.470	0.675
Phenols mg/l	0.006	0.004	0.003	0.005	0.004	0.003	0.006

Physical and Chemical Analysis of Vistula Water — Enclosure 48
April 2 - 3, 1974

Sampling stations / Analysis	1	2	3			4			4a	5			6	7	8	9
			l	m	r	l	m	r		l	m	r				
Date	4.2	4.2	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
Hour	10^{30}	12^{15}	9^{20}	10^{22}	10^{30}	9^{50}	9^{54}	9^{58}	10^{35}	13^{10}	13^{05}	13^{00}	14^{05}	15^{00}	15^{45}	16^{10}
Temp. of air °C	9	12	12	12	12	12	12	12	12	13	13	13	14	14	14	14
Temp. of water °C	9.4	9.0	8.2	7.8	7.6	10.2	9.0	7.4	8.0	9.8	9.4	9.8	10.6	9.6	10.6	10.2
Colour mg/l Pt	40	45	35	45	40	40	35	40	40	40	45	45	30	40	35	30
Conductance /u S	850	875	530	520	530	550	580	580	550	540	560	560	510	520	530	535
Odor /cold/	1 P	2 P	1 P	1 P	1 P	1 P	1 P	2 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P
pH	8.1	8.1	7.9	8.2	8.2	8.3	8.2	8.1	8.0	8.2	8.1	8.0	8.2	8.1	8.0	8.1
DO mg/l O_2	10.3	10.2	11.0	10.9	11.1	10.4	10.9	11.0	10.6	11.8	11.4	11.4	11.7	12.1	12.2	12.0
Saturation %	88	88	92	91	93	91	94	90	89	104	99	100	105	106	110	105
BOD_5 mg/l O_2	3.3	6.1	5.7	5.8	5.9	6.5	6.3	5.8	7.2	6.1	6.6	6.7	5.2	6.3	6.5	5.6
COD "	13.3	10.2	10.3	16.5	15.1	16.0	11.1	14.2	13.8	9.8	10.1	12.4	11.6	12.5	12.0	24.0
NH_3 - N mg/l	2.15	2.64	1.84	1.93	1.90	1.80	1.88	1.88	1.78	1.69	1.65	1.71	1.37	1.50	1.43	1.43
NO_2 - N "	0.028	0.052	0.010	0.010	0.010	0.052	0.037	0.042	0.060	0.063	0.058	0.058	0.050	0.054	0.063	0.063
NO_3 - N "	0.80	0.98	0.93	0.92	0.94	0.84	0.84	0.95	1.0	1.0	1.1	1.1	0.91	1.1	1.1	1.2
Organic N "	1.10	1.40	1.42	1.35	1.67	1.29	1.65	1.37	1.13	1.52	1.24	1.40	1.40	1.07	1.22	1.72
Residue:																
Total "	589	618	547	572	566	583	563	358	568	499	597	561	371	524	513	542
Volatile "	135	152	131	122	105	74	121	132	110	158	88	117	125	146	151	124
Fixed "	454	466	416	450	461	509	442	226	458	341	509	444	246	378	362	418
Orthophosphate mg/l PO_4	0.065	0.255	0.150	0.137	0.150	0.140	0.177	0.140	0.155	0.125	0.105	0.112	0.072	0.070	0.062	0.107
Total Phosphate "	0.350	0.722	0.655	0.357	0.380	0.675	0.305	0.787	0.570	0.725	0.385	0.387	0.430	0.437	0.620	0.337
Phenols mg/l	0.006	0.007	0.010	0.010	0.010	0.010	0.005	0.006	0.008	0.007	0.007	0.007	0.005	0.007	0.007	0.006

Enclosure 49

Physical and Chemical Analysis of Vistula Tributaries Water

April 2 - 3, 1974

Sampling stations / Analysis		Kurów-ka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
		I	II	III	IV	V	VI	VII
Date		4.2	4.2	4.3	4.3	4.2	4.2	4.3
Hour		11^{55}	12^{55}	8^{25}	10^{10}	7^{45}	7^{10}	15^{10}
Temp. of air	°C	10	14	8	12	8	8	14
Temp. of water	°C	12.0	7.8	7.0	17.6	6.0	8.0	12
Colour	mg/l Pt	35	35	55	35	70	30	55
Conductance	/u S	960	485	555	590	440	405	540
Odor /cold/		2 P	2 P	1P/S	1 P	1 P	1 P	3 S
pH		7.5	8.0	7.8	8.2	7.8	8.2	6.3
DO	mg/l O_2	8.7	9.7	9.1	9.5	8.1	10.4	8.6
Saturation	%	80	80	74	99	64	87	79
BOD_5	mg/l O_2	7.0	3.4	4.3	6.5	3.8	2.9	14
COD	"	17.8	20.5	8.5	15.3	18.7	8.5	60.0
NH_3 - N	"	14.8	1.04	0.52	1.76	3.27	0.30	0.99
NO_2 - N	"	0.368	0.015	0.138	0.094	0.015	0.008	0.080
NO_3 - N	"	5.3	0.40	6.0	1.2	0.14	0.34	0.45
Organic N	"	7.80	1.91	1.30	1.65	2.10	1.06	2.97
Residue:								
Total	"	655	351	471	563	311	301	447
Volatile	"	201	120	153	119	102	79	131
Fixed	"	454	231	318	444	209	222	316
Orthophosphate	mg/l PO_4	0.022	0.102	0.065	0.117	0.257	0.047	0.220
Total Phosphate	"	0.402	0.765	0.415	0.415	0.675	0.215	0.650
Phenols	mg/l	0.008	0.003	0.005	0.010	0.007	0.004	0.011

Enclosure 50

Physical and Chemical Analysis of Vistula Water
May 6 – 8, 1974

Sampling stations / Analysis		1			2			3			4			4a		
		l	m	r	l	m	r	l	m	r	l	m	r	l	m	r
Date		5.6	5.6	5.6	5.6	5.6	5.6	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Hour		5^{10}	5^{20}	5^{30}	11^{40}	11^{30}	11^{28}	11^{55}	12^{03}	12^{10}	13^{00}	13^{05}	13^{10}	17^{20}	17^{25}	17^{30}
Temp. of air	°C	11	11	11	19	19	19	9	9	9	9	9	9	7	7	7
Temp. of water	°C	14.4	14.4	14.4	14.6	15.4	15.4	13.2	13.3	13.0	15.5	13.6	13.2	14.4	13.0	13.0
Turbicidity	mg/l SiO_2	12	12	17	14	12	14	17	20	17	23	20	23	23	23	23
Colour	mg/l Pt	40	40	40	40	40	45	35	40	40	35	40	45	35	35	30
Conductance	/u S	780	770	760	770	780	790	710	710	730	740	740	740	705	710	730
Odor /cold/		2 P	2 P	1 P	2 P	1 P	2 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P
pH		7.8	7.8	7.8	8.1	8.1	8.0	8.3	7.9	8.2	8.4	8.4	8.4	8.5	8.5	8.5
DO	mg/l O_2	8.1	8.1	8.0	10.4	10.3	9.4	10.5	10.3	10.3	10.0	10.5	10.7	10.4	10.5	10.9
Saturation	%	79	79	78	102	102	93	99	97	97	99	100	101	101	99	103
BOD_5	mg/l O_2	7.9	7.8	7.9	9.4	9.6	9.2	10.	9.9	10	9.7	10.	10.	10.	10	10.
COD	"	32.2	27.7	26.7	25.2	25.7	32.7	37.6	34.6	35.6	39.1	31.7	33.2	37.1	45.0	29.7
NH_3 – N	mg/l	1.30	1.37	1.38	1.13	1.30	1.72	0.56	0.58	0.46	0.61	0.56	0.56	0.34	0.34	0.34
NO_2 – N	"	0.096	0.108	0.080	0.096	0.080	0.112	0.073	0.076	0.068	0.090	0.092	0.094	0.065	0.068	0.074
NO_3 – N	"	0.89	0.86	0.79	0.96	0.90	1.1	1.4	1.4	1.4	1.2	1.5	1.3	1.4	1.4	1.4
Organic N	"	1.08	1.58	1.54	2.23	1.50	2.83	3.23	3.76	2.31	2.17	1.64	2.45	2.00	2.24	2.13
Residue:																
Total	"	530	569	579	505	564	580	544	544	576	566	569	555	539	576	580
Volatile	"	157	165	178	203	190	177	176	203	153	149	155	191	146	180	173
Fixed	"	373	404	401	302	374	403	368	341	423	417	414	364	393	396	407
Orthophosphate	mg/l PO_4	0.117	0.315	0.225	0.267	0.337	0.452	0.115	0.220	0.212	0.170	0.150	0.162	0.190	0.115	0.160
Total Phosphate	"	0.625	0.400	0.370	0.675	0.682	0.485	0.735	0.445	0.585	0.625	0.717	0.559	0.305	0.460	0.550
Phenols	mg/l	0.005	0.007	0.006	0.006	0.008	0.008	0.006	0.006	0.006	0.006	0.006	0.007	0.007	0.006	0.006

Enclosure 50 (continued)

Sampling stations		5	6			7			8			9		
Analysis			l	m	r	l	m	r	l	m	r	l	m	r
Date		5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
Hour		0^{20}	8^{15}	8^{35}	8^{55}	14^{40}	14^{35}	14^{50}	18^{00}	18^{05}	18^{10}	20^{25}	20^{30}	20^{35}
Temp. of air	°C	7	4	4	4	8	8	8	5	5	5	5	5	5
Temp. of water	°C	13.0	10.6	10.4	10.4	11.0	11.0	11.2	10.8	10.8	11.0	11.0	10.8	10.8
Turbicidity	mg/l SiO_2	20	20	17	20	23	23	30	23	20	20	23	30	30
Colour	mg/l Pt	50	35	40	40	35	35	40	40	35	30	35	35	40
Conductance	/uS	720	640	640	700	660	660	650	660	660	650	700	680	680
Odor /cold/		1 P	1 P	1 P	2 P	1 P	1 P	1 P	1 P	1 P	1 P	2 P	2 P	2 P
pH		8.3	8.4	8.4	8.6	8.1	8.6	8.6	8.7	8.8	8.7	8.5	8.8	8.7
DO	mg/l O_2	9.5	10.7	10.2	11.2	10.2	10.6	9.3	10.2	9.5	9.2	9.9	9.3	10.5
Saturation	%	90	94	90	98	101	105	93	92	86	91	98	84	95
BOD_5	mg/l O_2	9.3	10	9.7	10	7.6	8.0	6.8	8.0	7.4	6.8	8.3	7.6	8.0
COD	mg/l O_2	30.7	33.6	28.7	32.2	44.1	39.6	32.2	43.6	34.6	34.7	40.6	51.5	40.6
NH_3 - N	mg/l	0.30	0.24	0.24	0.26	0.30	0.34	0.32	0.32	0.32	0.34	0.34	0.32	0.36
NO_2 - N	"	0.060	0.036	0.037	0.042	0.065	0.070	0.080	0.052	0.069	0.082	0.065	0.083	0.064
NO_3 - N	"	1.3	1.1	1.3	1.3	1.5	1.4	1.4	1.5	1.3	1.3	1.2	1.2	1.5
Organic N	"	2.20	2.24	1.65	1.87	2.17	2.35	2.24	1.95	2.27	2.31	2.31	2.20	1.95
Residue:														
Total	mg/l	559	501	513	550	531	540	556	538	543	544	539	536	544
Volatile	"	167	154	145	175	152	151	156	155	157	158	160	152	163
Fixed	"	392	347	368	375	379	389	400	383	386	386	379	384	381
Orthophosphate	mg/l PO_4	0.150	0.157	0.150	0.185	0.077	0.172	0.105	0.095	0.075	0.110	0.080	0.162	0.070
Total Phosphate	"	0.685	0.555	0.560	0.550	0.530	0.430	0.400	0.305	0.282	0.567	0.555	0.300	0.655
Phenols	mg/l	0.005	0.007	0.007	0.007	0.006	0.008	0.008	0.008	0.007	0.008	0.009	0.008	0.007

Enclosure 51

Physical and Chemical Analysis of Vistula Tributaries Water
May 6 - 8, 1974

Analysis \ Sampling stations		Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
		I	II	III	IV	V	VI	VII
Date		5.6	5.6	5.7	5.7	5.7	5.7	5.8
Hour		10^{00}	18^{12}	11^{30}	12^{00}	14^{20}	1^{00}	14^{55}
Temp. of air	°C	11	16	8	9	10	7	8
Temp. of water	°C	19.4	17.0	12.5	22.8	12.0	11.5	11.6
Turbicidity	mg/l SiO_2	23	23	23	17	23	14	52
Colour	mg/l Pt	45	50	50	45	60	30	60
Conductance	/u S	960	470	500	740	390	400	460
Odor /cold/		1 P	1 P	2 P	1 S	3 G	1 P	3 S
pH		7.6	8.2	7.8	8.3	7.9	8.4	7.2
DO	mg/l O_2	7.5	10.0	6.6	9.1	6.2	10.4	7.3
Saturation	%	79	102	62	104	57	95	66
BOD_5	mg/l O_2	20	7.4	3.6	11	17	2.7	25
COD	"	40.1	33.7	33.2	31.6	48.3	18.1	44.6
NH_3 - N	mg/l	14.1	0.86	0.70	0.69	2.57	0.28	1.12
NO_2 - N	"	0.510	0.156	0.090	0.060	0.008	0.000	0.024
NO_3 - N	"	4.1	0.39	2.9	1.7	0.11	0.06	0.40
Organic N	"	9.00	2.02	2.05	2.93	2.16	1.08	1.98
Residue:								
Total	"	680	347	439	531	332	321	407
Volatile	"	196	163	168	207	131	76	139
Fixed	"	484	184	271	324	201	245	268
Orthophosphate	mg/l PO_4	0.285	0.615	0.105	0.190	0.275	0.130	0.600
Total Phosphate	"	0.495	0.950	0.452	0.680	0.432	0.400	-
Phenols	mg/l	0.007	0.005	0.004	0.006	0.004	0.006	0.01

Physical and Chemical Analysis of Vistula Water
June 4 - 6, 1974

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Sampling stations / Analysis		1 l	1 m	1 r	2	3 l	3 m	3 r	4 l	4 m	4 r	4a l	4a m	4a r	5	6	7	8	9
Date		6.4	6.4	6.4	6.4	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.6	6.6	6.6
Hour		12^{00}	12^{05}	12^{10}	15^{15}	7^{45}	7^{50}	8^{00}	8^{50}	8^{55}	9^{00}	12^{30}	12^{45}	13^{05}	18^{10}	19^{00}	6^{20}	6^{00}	10^{25}
Temp. of air	°C	21	21	21	18	18	18	18	18	18	18	20	20	20	17	15	12	18	19
Temp. of water	°C	21.0	21.0	21.0	18.5	16.8	16.8	16.8	17.6	16.6	16.6	17.5	18.0	18.0	18.0	17.0	16.5	15.5	18.0
Turbicidity	mg/l SiO_2	100	143	55	40	30	30	23	23	30	26	30	30	23	23	17	50	65	30
Colour	mg/l Pt	35	35	30	30	40	40	40	45	40	40	35	50	45	60	40	50	55	40
Conductance	/u S	570	530	570	550	560	560	560	600	540	580	610	590	570	640	630	650	600	580
Odor /cold/		1P	1 P	1 P	2 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P
pH		7.8	7.8	7.8	8.0	7.4	7.4	7.7	7.7	7.7	7.8	7.8	7.7	7.7	7.9	8.3	7.8	7.6	7.3
DO	mg/l O_2	6.1	5.5	7.2	6.7	5.7	5.7	6.2	5.8	5.7	6.2	6.3	5.7	5.9	6.5	8.9	6.8	6.3	8.5
Saturation	%	67	61	80	71	58	58	63	60	58	63	66	59	61	68	91	69	64	89
BOD_5	mg/l O_2	4.0	3.4	3.9	5.4	4.1	4.0	4.1	4.4	4.1	4.7	4.4	4.3	4.3	4.6	5.7	5.1	4.2	6.3
COD	"	29.7	35.3	27.0	26.0	46.9	46.0	35.3	40.0	40.9	29.8	27.9	38.6	38.6	27.5	26.0	34.4	31.6	15.3
NH_3- N	mg/l	0.92	0.91	0.66	2.20	0.91	0.87	0.86	0.73	0.75	0.76	0.80	0.78	0.72	0.61	0.34	0.40	0.28	0.30
NO_2- N	"	0.063	0.071	0.062	0.156	0.056	0.054	0.058	0.060	0.060	0.068	0.068	0.071	0.076	0.068	0.030	0.075	0.080	0.063
NO_3- N	"	1.2	1.3	1.2	1.8	1.6	1.5	1.4	1.4	1.2	1.2	1.4	1.5	1.5	1.1	1.0	1.3	1.4	1.3
Organic N	"	2.27	2.28	1.52	2.10	2.02	2.20	2.16	2.60	2.35	2.02	2.50	2.20	2.55	2.05	1.40	2.35	2.20	1.30
Residue:																			
Total	"	581	593	485	489	632	640	537	645	613	539	547	590	561	543	881	551	566	419
Volatile	"	155	162	158	167	162	161	159	168	154	149	145	143	151	163	144	147	158	127
Fixed	"	426	431	327	322	470	479	378	477	459	390	402	447	410	380	737	404	408	292
Orthophosphate	mg/l PO_4	0.150	0.157	0.112	0.272	0.225	0.217	0.230	0.125	0.225	0.205	0.060	0.200	0.255	0.105	0.175	0.192	0.162	0.125
Total Phosphate	"	0.895	0.820	0.950	0.920	1.540	1.555	1.505	1.160	1.555	1.250	1.210	1.510	1.310	1.390	1.510	1.270	1.320	1.520
Phenols	mg/l	0.005	0.005	0.005	0.006	0.004	0.003	0.006	0.003	0.003	0.003	0.005	0.004	0.006	0.006	0.006	0.004	0.004	0.004

Physical and Chemical Analysis of Vistula Tributaries Water
June 4 - 6, 1974

Sampling stations / Analysis		Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
		I	II	III	IV	V	VI	VII
Date		6.4	6.4	6.4	6.5	6.5	6.5	6.6
Hour		14^{10}	19^{05}	7^{30}	7^{55}	9^{50}	18^{30}	6^{35}
Temp. of air	^{o}C	18	15	14	18	19	17	12
Temp. of water	^{o}C	22.0	18.5	16.0	25.8	17.2	18.0	15.0
Turbicidity	mg/l SiO_2	20	17	12	20	26	20	32
Colour	mg/l Pt	25	40	35	40	50	40	60
Conductance	μS	675	435	650	620	420	440	520
Odor /cold/		1 P	1 P	1 P	1 P	1 P	1 P	1 P
pH		7.5	8.1	7.9	7.8	7.5	8.6	8.9
DO	mg/l O_2	6.9	6.8	6.7	7.0	3.1	11.5	3.3
Saturation	%	78	72	67	85	31	120	32
BOD_5	mg/l O_2	5.7	4.4	2.2	4.0	12	5.8	4.5
COD	"	25.2	23.4	13.9	18.8	58.9	25.4	32.6
NH_3 - N	mg/l	11.9	1.98	0.32	0.60	3.06	0.36	1.15
NO_2 - N	"	0.500	0.094	0.095	0.073	0.072	0.039	0.060
NO_3 - N	"	5.8	0.53	1.5	1.4	0.07	0.05	0.36
Organic N	"	9.03	1.92	1.65	1.73	3.34	2.16	3.76
Residue:								
Total	"	538	337	438	473	327	332	401
Volatile	"	222	120	133	134	122	83	123
Fixed	"	316	217	305	339	205	249	278
Orthophosphate	mg/l PO_4	0.090	0.692	0.115	0.185	0.255	0.150	0.530
Total Phosphate	"	0.830	1.57	1.51	1.23	1.27	1.06	1.23
Phenols	mg/l	0.007	0.005	0.005	0.006	0.008	0.005	0.007

Physical and Chemical Analysis of Vistula Water
June 25-27, 1974

Enclosure 54

Sampling stations		1	2	3			4			4a			5	6	7	8	9
Analysis				l	m	r	l	m	r	l	m	r					
Date		6.25	6.25	6.26	6.26	6.26	6.26	6.26	6.26	6.26	6.26	6.26	6.26	6.26	6.27	6.27	6.27
Hour		11^{00}	13^{00}	12^{25}	12^{30}	12^{35}	13^{10}	13^{15}	13^{20}	15^{50}	15^{55}	16^{00}	20^{00}	20^{45}	5^{50}	8^{05}	9^{05}
Temp. of air	°C	17	19	26	26	26	26	26	26	24	24	24	20	18	20	23	23
Temp. of water	°C	18.0	18.6	18.5	18.5	19.0	19.8	19.0	18.5	20.6	19.4	19.4	22.2	20.4	20.2	20.2	20.2
Turbicidity	mg/l SiO_2	85	61	46	36	40	55	50	36	64	52	55	50	36	46	40	30
Colour	mg/l Pt	40	55	40	35	40	40	45	40	45	40	45	35	40	45	40	40
Conductance	/u S	510	480	520	505	505	540	505	505	540	510	510	530	510	510	505	500
Odor /cold/		2 P	2 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P
pH		7.7	8.0	8.1	8.1	8.0	7.9	8.0	8.2	8.0	8.1	8.2	8.1	8.3	7.9	7.5	8.0
DO	mg/l O_2	5.7	6.9	6.3	6.5	5.9	6.4	6.1	6.2	7.0	6.7	7.3	6.4	7.4	6.6	6.6	7.7
Saturation	%	59	73	67	69	63	69	65	66	77	71	78	72	80	70	70	83
BOD_5	mg/l O_2	2.4	6.4	1.9	1.7	1.0	1.1	1.2	1.5	1.9	1.7	2.3	2.4	2.1	1.6	1.6	2.8
COD	"	25.3	21.6	20.5	20.2	20.7	19.8	20.7	23.0	23.4	23.0	24.4	26.2	22.0	28.9	23.0	20.6
NH_3 - N	mg/l	0.48	1.37	0.34	0.36	0.38	0.40	0.48	0.44	0.32	0.42	0.42	0.40	0.42	0.33	0.36	0.44
NO_2 - N	"	0.049	0.079	0.054	0.082	0.082	0.034	0.059	0.086	0.064	0.064	0.080	0.086	0.047	0.052	0.052	0.054
NO_3 - N	"	1.2	1.6	1.2	1.0	0.96	1.4	1.5	1.3	1.2	1.2	1.1	1.4	0.94	1.2	1.2	1.2
Organic N	"	1.40	1.33	1.28	1.49	1.15	1.54	1.15	0.88	0.88	1.12	1.33	0.62	0.90	1.08	1.23	0.83
Residue:																	
Total	"	478	422	425	417	412	462	423	382	417	417	380	453	394	395	399	423
Volatile	"	155	147	139	143	139	137	130	124	118	118	114	144	128	133	127	151
Fixed	"	323	275	286	274	273	325	293	258	299	299	266	309	266	262	272	272
Orthophosphate	mg/l PO_4	0.172	0.190	0.100	0.160	0.337	0.075	0.272	0.055	0.050	0.087	0.075	0.050	0.060	0.095	0.102	0.230
Total Phosphate	"	0.820	0.875	1.34	1.41	1.37	1.01	1.06	0.905	1.08	1.02	1.17	1.25	1.38	1.21	1.31	1.29
Phenols	mg/l	0.004	0.004	0.004	0.005	0.004	0.004	0.003	0.004	0.004	0.005	0.004	0.004	0.003	0.003	0.002	0.004

Enclosure 55

Physical and Chemical Analysis of Vistula Tributaries Water
June 25 - 27,1974

Sampling stations / Analysis		Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
		I	II	III	IV	V	VI	VII
Date		6.25	6.25	6.26	6.26	6.26	6.26	6.27
Hour		12^{00}	14^{20}	12^{00}	12^{40}	13^{55}	20^{15}	6^{00}
Temp. of air	°C	18	22	26	26	26	19	20
Temp. of water	°C	22.0	20.0	18.1	31.0	22.0	22.8	19.4
Turbicidity	mg/l SiO_2	23	10	7	43	14	36	23
Colour	mg/l Pt	55	90	60	50	35	30	60
Conductance	µS	600	460	540	550	500	400	560
Odor /cold/		2 P	2 P	1 P	1 P	1 P	1 P	3 G
pH		7.6	8.0	7.6	7.8	7.8	8.4	6.8
DO	mg/l O_2	4.9	6.0	5.6	6.6	3.5	8.9	2.2
Saturation	%	55	65	58	88	39	102	23
BOD_5	mg/l O_2	11	4.2	3.4	2.0	5.0	3.4	9.0
COD	"	25.3	43.2	23.4	23.4	34.0	36.3	47.8
NH_3 - N	mg/l	19.3	0.62	0.74	0.56	3.16	0.42	1.12
NO_2 - N	"	0.320	0.018	0.610	0.054	0.064	0.016	0.174
NO_3 - N	"	6.8	0.40	2.9	1.5	0.13	0.22	0.28
Organic N	"	6.58	1.61	0.99	1.01	1.36	1.01	1.36
Residue:								
Total	"	459	391	412	425	337	282	415
Volatile	"	185	160	161	122	99	85	127
Fixed	"	274	231	251	303	238	197	288
Orthophosphate	mg/l PO_4	0.305	0.330	0.145	0.125	0.175	0.120	0.415
Total Phosphate	"	0.740	1.34	1.25	1.13	0.800	0.875	1.08
Phenols	mg/l	0.006	0.004	0.003	0.003	0.006	0.003	0.010

Enclosure 56

Physical and Chemical Analysis of Vistula Water

July 9 - 11, 1974

Sampling stations / Analysis	1	2 l	2 m	2 r	3 l	3 m	3 r	4 l	4 m	4 r	4a l	4a m	4a r	5	6	7	8	9
Date	7.9	7.9	7.9	7.9	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.11	7.11	7.11
Hour	11^{10}	15^{10}	15^{15}	15^{20}	10^{50}	11^{00}	11^{10}	11^{40}	12^{00}	12^{05}	14^{40}	14^{50}	15^{00}	19^{40}	21^{00}	6^{30}	9^{15}	10^{30}
Temp. of air °C	20_	20_	20_	20_	20_	20_	20_	20_	20_	20_	20_	20_	20_	16_	15_	16_	18_	18_
Temp. of water °C	17.6	17.2	16.8	17.5	17.6	17.4	17.0	16.6	17.6	17.2	18.4	17.8	17.0	18.0	17.4	17.4	17.6	17.8
Turbicidity mg/l SiO_2	14	14	32	26	55	58	52	52	50	52	58	52	61	46	36	52	46	40
Colour mg/l Pt	45	45	40	40	40	45	45	45	45	45	50	45	45	45	50	35	30	40
Conductance /μ S	515	535	525	540	530	525	515	500	525	520	505	522	515	510	460	460	470	490
Odor /cold/	1-P	1-P	1 P	1 P	1-P	1-P	1 P	1-P	1-P	1 P	1 P	1-P	1-P	1-P	1-P	1-P	1-P	1-P
pH	8.3	8.3	8.1	8.2	8.5	8.6	8.6	8.6	8.3	8.5	8.4	8.6	8.6	8.6	8.6	8.4	8.5	8.6
DO mg/l O_2	9.2	9.6	9.0	9.0	8.5	8.1	9.1	8.1	8.5	8.3	8.1	8.9	9.0	8.6	9.3	8.8	9.3	10.2
Saturation %	96	98	92	94	89	83	93	88	89	85	84	93	92	90	95	90	98	106
BOD_5 mg/l O_2	3.6	3.6	3.2	4.0	3.3	2.7	3.5	2.8	3.1	3.2	4.6	4.0	3.0	4.0	4.1	4.4	4.9	5.0
COD "	25.8	22.5	28.1	27.6	26.3	28.1	26.2	25.8	23.0	38.2	27.6	29.4	29.9	29.4	26.7	29.4	27.6	28.5
NH_3 - N mg/l	0.48	0.38	0.40	0.70	0.44	0.33	0.26	0.33	0.38	0.24	0.30	0.28	0.28	0.28	0.32	0.28	0.28	0.26
NO_2 - N "	0.015	0.028	0.015	0.036	0.018	0.022	0.029	0.013	0.023	0.027	0.026	0.015	0.021	0.016	0.015	0.005	0.008	0.004
NO_3 - N "	1.1	1.1	1.2	1.3	1.1	1.0	1.0	1.0	1.0	1.0	0.93	1.1	1.1	0.94	0.76	0.88	0.86	0.88
Organic N - "	1.43	1.50	1.50	1.26	1.95	1.98	-	1.57	1.33	2.20	2.30	1.98	2.42	1.80	1.54	1.46	1.31	1.22
Residue:																		
Total "	433	432	438	426	482	431	414	443	422	436	402	453	422	425	377	413	408	404
Volatile "	143	134	139	128	159	150	138	136	126	135	126	145	138	139	114	121	114	120
Fixed "	290	298	299	298	323	281	276	307	296	301	276	308	284	286	263	292	294	284
Orthophosphate mg/l PO_4	0.242	0.125	0.120	0.125	0.475	0.475	0.370	0.515	0.460	0.467	0.337	0.400	0.370	0.225	0.550	0.685	0.730	0.445
Total Phosphate "	0.650	0.530	0.665	0.717	0.655	0.730	0.460	0.577	0.717	0.577	0.775	0.610	0.630	0.675	1.04	0.707	1.06	0.590
Phenols mg/l	0.002	0.004	0.004	0.005	0.005	0.003	0.005	0.004	0.003	0.004	0.003	0.003	0.004	0.003	0.003	0.003	0.003	0.005

Physical and Chemical Analysis of Vistula Tributaries Water
July 9 - 11, 1974

Sampling stations / Analysis		Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
		I	II	III	IV	V	VI	VII
Date		7.9	7.9	7.10	7.10	7.10	7.10	7.11
Hour		14^{00}	16^{20}	10^{20}	11^{15}	12^{25}	20^{20}	6 45
Temp. of air	°C	21	20	19	20	19	15	16
Temp. of water	°C	21.0	17.0	18.0	27.4	17.4	17.4	16.4
Turbicidity	mg/l SiO_2	30	14	17	40	23	40	30
Colour	mg/l Pt	50	70	60	50	70	50	50
Conductance	/μS	675	450	445	530	440	320	500
Odor /cold/		1 P	1 P	1 P	1 P	1 S	1 P	2 S
pH		7.8	8.1	7.6	8.6	7.7	8.1	7.3
DO	mg/l O_2	5.8	7.0	5.8	7.9	4.4	8.2	5.4
Saturation	%	64	71	60	97	45	84	54
BOD_5	mg/l O_2	8.0	3.3	1.2	3.0	4.8	2.6	7.0
COD	"	28.5	32.2	22.1	26.7	47.0	30.5	41.3
NH_3 - N	mg/l	12.9	0.70	0.48	0.28	1.58	0.42	0.61
NO_2 - N	"	0.730	0.032	0.037	0.032	0.044	0.008	0.055
NO_3 - N	"	5.8	0.72	3.4	1.1	0.22	0.32	0.99
Organic N	"	5.46	2.06	1.46	1.91	2.53	1.54	1.74
Residue:								
Total	"	489	381	377	442	350	287	391
Volatile	"	166	152	137	143	112	81	133
Fixed	"	323	229	240	299	238	206	258
Orthophosphate	mg/l PO_4	0.305	0.357	0.385	0.402	0.515	0.475	0.730
Total Phosphate	"	0.530	1.15	0.645	0.577	0.665	---	0.800
Phenols	mg/l	0.006	0.003	0.003	0.004	0.008	0.004	0.006

Physical and Chemical Analysis of Vistula Water

Enclosure 58

August 6 - 8, 1974

Sampling stations / Analysis		1	2	3	4	4a			5			6	7	8	9
						l	m	r	l	m	r				
Date		8.6	8.6	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.8	8.8	8.8
Hour		13^{00}	16^{10}	11^{40}	12^{05}	14^{50}	14^{45}	14^{40}	19^{30}	19^{35}	19^{40}	20^{40}	6^{30}	9^{15}	10^{30}
Temp. of air	°C	21	21	24	24	22	22	22	19	19	19	17	16	19	23
Temp. of water	°C	21.0	21.4	21.2	22.0	21.8	21.2	20.4	21.7	21.4	21.0	20.1	20.8	19.8	21.2
Turbicidity	mg/l SiO_2	30	36	55	52	58	52	61	52	55	55	46	52	52	50
Colour	mg/l Pt	45	45	45	50	45	40	45	35	40	35	50	35	40	50
Conductance	/u S	590	600	590	600	570	580	570	580	570	580	490	540	540	540
Odor /cold/		1 P	1 P	1 P	2 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P
pH		7.9	7.6	8.6	8.5	8.6	8.6	8.6	8.6	8.6	8.5	8.5	8.7	8.6	8.7
DO	mg/l O_2	8.1	7.5	10.5	10.3	10.4	10.3	10.8	11.0	10.5	11.1	14.8	8.5	8.4	10.2
Saturation	%	90	83	116	114	115	114	117	124	116	123	161	94	91	113
BOD_5	mg/l O_2	3.9	4.3	5.7	5.4	5.7	4.8	5.1	6.3	5.5	5.7	7.7	5.2	5.2	6.4
COD	"	21.3	20.0	25.2	23.0	26.9	27.8	27.0	30.0	27.8	30.0	30.9	26.1	31.7	30.5
NH_3 - N	mg/l	0.36	1.04	0.33	0.31	0.33	0.38	0.38	0.36	0.32	0.34	0.34	0.36	0.34	0.38
NO_2 - N	"	0.024	0.066	0.023	0.016	0.017	0.014	0.020	0.016	0.011	0.013	0.014	0.010	0.012	0.012
NO_3 - N	"	1.0	1.2	0.92	0.90	0.88	0.94	1.1	1.0	0.94	0.97	0.64	0.72	0.65	0.68
Organic N	"	1.26	1.15	1.73	1.43	1.61	1.91	1.50	1.73	1.73	1.88	1.46	1.58	1.69	1.50
Residue:															
Total	"	452	466	473	475	454	458	458	471	458	445	406	429	429	422
Volatile	"	133	157	170	171	155	143	157	165	150	148	122	143	114	138
Fixed	"	319	309	303	304	299	315	301	306	308	297	284	286	315	284
Orthophosphate	mg/l PO_4	0.045	0.165	0.437	0.400	0.305	0.330	0.280	0.160	0.185	0.180	0.445	0.585	0.685	0.415
Total Phosphate	"	0.445	0.500	1.34	1.29	0.550	0.555	0.625	0.585	0.515	0.560	1.32	1.27	1.24	0.505
Phenols	mg/l	0.003	0.004	0.003	0.003	0.002	0.002	0.003	0.002	0.003	0.003	0.004	0.004	0.005	0.004

Physical and Chemical Analysis of Vistula Tributaries Water
August 6 - 8,1974

Sampling stations / Analysis		Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
		I	II	III	IV	V	VI	VII
Date		8.6	8.6	8.7	8.7	8.7	8.7	8.8
Hour		15^{20}	17^{00}	10^{20}	11^{40}	12^{25}	20^{00}	6^{45}
Temp. of air	°C	21	22	20	24	24	18	16
Temp. of water	°C	24.8	20.6	18.2	27.2	20.4	20.4	16.4
Turbidity	mg/l SiO_2	23	20	30	36	23	46	32
Colour	mg/l Pt	60	50	50	45	60	60	70
Conductance	μS	680	480	570	590	450	380	510
Odor /cold/		1 P	1 P	1 P	1 P	1 P	1 P	1 P
pH		7.6	7.6	8.3	8.6	8.3	8.5	7.8
DO	mg/l O_2	6.1	5.9	3.8	9.0	4.9	9.5	7.5
Saturation	%	72	65	39	111	53	103	75
BOD_5	mg/l O_2	6.4	2.4	1.8	4.8	4.3	3.4	6.5
COD	"	23.9	34.8	24.8	27.4	32.6	33.0	28.9
NH_3 - N	mg/l	11.0	0.84	0.76	0.33	2.45	0.58	1.22
NO_2 - N	"	0.61	0.020	0.288	0.022	0.236	0.006	0.096
NO_3 - N	"	4.5	0.46	1.9	0.90	0.08	0.19	0.27
Organic N	"	9.17	1.84	1.30	1.62	1.95	1.26	1.48
Residue:								
Total	"	516	389	371	465	332	304	400
Volatile	"	201	157	116	153	128	83	133
Fixed	"	315	232	255	312	204	221	267
Orthophosphate	mg/l PO_4	0.185	0.460	0.430	0.405	0.385	0.445	0.625
Total Phosphate	"	0.377	0.950	1.25	0.467	0.457	1.05	1.07
Phenols	mg/l	0.006	0.005	0.004	0.004	0.004	0.004	0.007

Physical and Chemical Analysis of Vistula Water

September 3 - 5, 1974

Enclosure 60

Sampling stations / Analysis		1	2	3			4			4a			5	6			7	8	9
				l	m	r	l	m	r	l	m	r		l	m	r			
Date		9.3	9.3	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.5	9.5	9.5
Hour		11^{00}	14^{25}	8^{10}	8^{15}	8^{20}	9^{05}	9^{10}	9^{20}	12^{35}	12^{40}	12^{45}	18^{10}	19^{00}	19^{10}	19^{20}	6^{55}	10^{05}	11^{30}
Temp. of air	°C	24	25	22	22	22	23	23	23	19	19	19	17	16	16	16	14	17	19
Temp. of water	°C	20.0	21.0	20.0	20.2	20.0	24.8	22.5	20.0	21.4	21.7	20.1	20.5	19.0	19.2	19.0	17.8	19.0	19.4
Turbicidity	mg/l SiO_2	23	43	50	52	50	55	50	55	55	58	52	50	46	50	46	55	30	40
Colour	mg/l Pt	40	45	50	40	45	35	30	35	50	45	50	40	50	50	50	40	40	50
Conductance	μ S	710	720	640	640	620	640	640	630	600	620	600	580	500	510	500	560	560	560
Odor /cold/		2 P	2 P	2 P	2 P	2 P	2 P	2 P	2 P	2 P	2 P	2 P	2 P	1 P	1 P	1 P	1 P	2 P	1 P
pH		8.4	8.5	8.0	8.1	8.1	8.2	8.2	8.1	8.1	8.2	8.4	8.3	8.3	8.3	8.4	8.4	8.6	8.4
DO	mg/l O_2	13.8	12.9	12.1	8.8	10.6	9.7	11.7	11.1	10.4	10.8	10.7	10.1	9.1	9.4	9.3	7.8	11.6	10.9
Saturation	%	150	143	131	95	115	115	134	121	115	120	116	112	97	100	99	81	124	116
BOD_5	mg/l O_2	8.5	8.2	7.4	4.4	6.0	5.5	6.9	6.3	7.3	7.8	7.1	7.1	6.6	6.5	6.5	5.4	7.8	7.5
COD	"	29.6	32.8	32.4	32.0	31.2	30.8	28.4	33.6	32.8	30.8	21.3	33.6	36.0	20.3	23.8	33.5	22.3	36.8
NH_3 - N	mg/l	0.42	0.43	0.22	0.22	0.19	0.22	0.20	0.20	0.30	0.18	0.18	0.19	0.32	0.28	0.28	0.22	0.24	0.18
NO_2 - N	"	0.006	0.019	0.022	0.021	0.023	0.023	0.023	0.026	0.030	0.027	0.024	0.022	0.014	0.015	0.019	0.008	0.008	0.008
NO_3 - N	"	0.75	1.0	1.0	1.0	0.94	0.76	0.94	0.78	1.0	1.0	0.93	0.78	0.67	0.66	0.64	0.79	0.71	0.70
Organic N	"	1.54	1.80	1.52	1.63	1.67	2.07	1.65	1.62	2.00	1.95	1.43	2.06	2.28	1.84	1.90	1.70	2.18	1.88
Residue:																			
Total	"	514	500	483	496	481	468	490	476	504	546	520	495	373	390	373	451	414	440
Volatile	"	173	210	151	178	158	194	178	154	166	177	174	168	151	123	123	142	167	139
Fixed	"	341	290	332	318	323	274	312	322	338	369	346	327	242	267	256	309	247	301
Orthophosphate	mg/l PO_4	0.160	0.205	0.175	0.330	0.377	0.287	0.287	0.310	0.317	0.280	0.430	0.272	0.200	0.385	0.392	0.475	0.705	0.385
Total Phosphate	"	0.370	0.460	0.540	0.550	0.505	0.445	0.422	0.460	0.675	0.750	0.620	0.515	0.467	0.505	0.530	0.665	1.10	0.445
Phenols	mg/l	0.005	0.005	0.005	0.005	0.004	0.003	0.003	0.005	0.005	0.004	0.003	0.005	0.003	0.003	0.002	0.003	0.004	0.002

Physical and Chemical Analysis of Vistula Tributaries Water

September 3 - 5, 1974

Analysis \ Sampling stations		Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
		I	II	III	IV	V	VI	VII
Date		9.3	9.3	9.4	9.4	9.4	9.4	9.5
Hour		13^{15}	18^{35}	7^{40}	8^{30}	10^{05}	18^{40}	7^{10}
Temp. of air	°C	24	25	18	23	23	17	14
Temp. of water	°C	25.6	21.0	17.4	29.0	20.2	19.0	17.2
Turbicidity	mg/l SiO_2	26	23	36	43	40	55	40
Colour	mg/l Pt	70	60	60	50	60	50	160
Conductance	μS	780	540	560	630	450	460	550
Odor /cold/		1 P	1 P	1 P	1 P	1 S	1 P	3 S
pH		7.7	8.0	7.3	8.2	7.5	8.5	6.6
DO	mg/l O_2	7.9	6.9	5.1	10.1	5.1	7.7	1.8
Saturation	%	96	76	52	129	55	82	18
BOD_5	mg/l O_2	6.7	3.6	1.9	6.3	6.0	5.1	15
COD	"	28.0	27.6	19.4	33.5	23.8	34.9	53.4
NH_3 - N	mg/l	11.5	0.30	0.82	0.28	3.01	0.30	1.34
NO_2 - N	"	0.140	0.023	0.094	0.027	0.058	0.004	0.035
NO_3 - N	"	3.5	0.88	6.0	1.2	0.18	0.07	0.19
Organic N	"	9.66	1.15	0.92	1.65	1.52	1.26	1.68
Residue:								
Total	"	490	379	472	495	317	304	467
Volatile	"	220	183	182	158	126	111	148
Fixed	"	270	196	290	337	191	193	319
Orthophosphate	mg/l PO_4	0.167	0.665	0.370	0.422	0.550	0.467	0.675
Total Phosphate	"	0.690	1.00	0.585	0.560	0.800	0.770	1.03
Phenols	mg/l	0.008	0.003	0.005	0.007	0.005	0.005	0.014

Physical and Chemical Analysis of Vistula Water
September 17 - 19, 1974

Enclosure 62

Sampling stations / Analysis		1	2	3			4			4a			5	6	7			8	9
				l	m	r	l	m	r	l	m	r			l	m	r		
Date		9.17	9.17	9.18	9.18	9.18	9.18	9.18	9.18	9.18	9.18	9.18	9.18	9.18	9.19	9.19	9.19	9.19	9.19
Hour		11^{50}	15^{00}	8^{10}	8^{20}	8^{30}	9^{20}	9^{30}	9^{40}	13^{15}	13^{30}	13^{40}	19^{45}	20^{10}	9^{20}	9^{25}	9^{30}	13^{15}	14^{45}
Temp. of air	°C	19	16	21	21	21	21	21	21	21	21	21	17	15	16	16	16	20	20
Temp. of water	°C	17.4	16.4	16.6	16.0	15.8	18.4	17.4	18.0	18.0	17.6	17.2	18.6	18.6	16.6	16.6	16.8	17.0	17.2
Colour	mg/l Pt	45	40	50	50	50	50	50	50	50	50	50	45	45	45	45	150	140	45
Conductance	/u S	770	780	750	750	750	750	750	750	710	750	730	700	630	640	660	670	660	650
Odor /cold/		2 P	2 P	1 P	1 P	1 P	1 P	1 P	1 P	2 P	2 P	1 P	1 P	1 P	2 P	2 P	2 P	1 P	1 P
pH		7.8	7.7	8.0	8.0	8.1	8.1	8.1	8.1	8.0	8.0	7.9	8.0	8.1	7.9	8.1	8.2	8.2	8.3
DO	mg/l O_2	12.4	11.7	13.9	14.3	14.2	12.6	13.2	14.3	11.2	11.7	13.3	14.5	14.8	11.0	11.5	11.0	11.8	10.9
Saturation	%	127	117	142	143	142	132	135	149	117	122	136	155	158	112	118	112	121	111
BOD_5	mg/l O_2	6.3	7.3	8.2	9.2	8.4	7.1	7.9	8.6	6.0	6.3	8.0	8.6	7.6	7.2	8.1	7.6	8.2	7.1
COD	"	26.2	25.2	28.6	31.0	27.2	27.6	29.6	31.0	34.0	33.5	32.0	36.4	35.4	33.0	32.0	33.9	34.9	34.9
NH_3 - N	mg/l	0.24	1.00	0.40	0.42	0.43	0.42	0.43	0.42	0.45	0.33	0.38	0.38	0.38	0.22	0.26	0.31	0.22	0.26
NO_2 - N	"	0.029	0.053	0.024	0.021	0.024	0.024	0.026	0.026	0.031	0.026	0.029	0.023	0.020	0.012	0.015	0.015	0.017	0.018
NO_3 - N	"	1.1	1.1	1.2	1.1	1.0	1.0	0.86	0.91	0.98	0.83	0.89	0.95	0.74	0.86	0.76	0.82	0.88	0.84
Organic N	"	1.70	1.90	1.60	1.50	1.80	2.00	1.70	1.60	2.30	2.80	2.00	1.90	1.80	2.30	2.30	2.40	2.10	1.70
Residue:																			
Total	"	622	599	578	579	579	590	583	574	572	522	581	550	482	534	517	539	623	523
Volatile	"	190	171	172	177	178	175	173	170	172	142	173	159	151	168	162	164	155	154
Fixed	"	432	428	406	402	401	415	410	404	400	380	408	391	331	366	355	375	368	369
Orthophosphate	mg/l PO_4	0.070	0.167	0.165	0.197	0.187	0.255	0.242	0.215	0.145	0.167	0.137	0.162	0.155	0.167	0.220	0.205	0.200	0.185
Total Phosphate	"	0.400	0.475	0.515	0.507	0.467	0.417	0.385	0.437	0.540	0.570	0.585	0.625	0.645	0.480	0.495	0.540	0.452	0.485
Phenols	mg/l	0.007	0.007	0.007	0.007	0.007	0.006	0.006	0.007	0.014	0.009	0.014	0.007	0.018	0.007	0.007	0.005	0.005	0.007

Physical and Chemical Analysis of Vistula Tributaries Water

September 17 - 19,1974

Sampling stations / Analysis		Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
		I	II	III	IV	V	VI	VII
Date		9.17	9.17	9.18	9.18	9.18	9.18	9.19
Hour		13^{00}	15^{20}	7^{45}	8^{40}	10^{25}	20^{00}	9^{50}
Temp. of air	^{o}C	20	15	13	21	21	17	16
Temp. of water	^{o}C	21.0	15.4	13.4	23.6	17.0	17.4	14.2
Colour	mg/l Pt	45	60	60	50	70	50	45
Conductance	μS	840	450	510	750	480	400	470
Odor /cold/		2 P	1 P	1 P	1 P	1 S	1 P	1 S
pH		7.1	7.5	7.2	8.0	7.4	8.0	7.3
DO	mg/l O_2	7.8	6.8	5.9	10.5	5.0	9.9	5.1
Saturation	%	86	67	55	110	51	101	49
BOD_5	mg/l O_2	7.2	2.7	1.1	7.0	3.7	3.3	5.5
COD	"	28.6	21.3	13.6	30.9	24.7	23.8	23.3
NH_3 - N	mg/l	13.0	0.48	0.42	0.33	3.65	0.38	0.35
NO_2 - N	"	0.290	0.044	0.092	0.026	0.126	0.005	0.142
NO_3 - N	"	3.7	0.88	5.6	1.0	0.08	0.16	0.13
Organic N	"	8.20	1.50	0.80	1.80	3.70	1.50	1.60
Residue:								
Total	"	639	440	465	593	341	306	337
Volatile	"	214	158	168	125	119	88	114
Fixed	"	425	282	297	468	222	218	223
Orthophosphate	mg/l PO_4	0.107	0.665	0.195	0.155	0.200	0.145	0.362
Total Phosphate	"	0.770	1.08	0.740	0.457	1.11	0.950	1.08
Phenols	mg/l	0.010	0.003	0.003	0.003	0.006	0.003	0.006

Enclosure 64

Physical and Chemical of Vistula Water

October 8 - 9, 1974

Sampling stations	1			2			3			4			4a		
Analysis	l	m	r	l	m	r	l	m	r	l	m	r	l	m	r
Date	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
Hour	1^{40}	1^{50}	1^{55}	3^{55}	4^{05}	4^{15}	14^{30}	14^{35}	14^{40}	15^{05}	15^{10}	15^{15}	17^{30}	17^{35}	17^{40}
Temp. of air °C	7	7	7	7	7	7	12	12	12	12	12	12	10	10	10
Temp. of water °C	9.2	9.4	9.4	9.4	9.6	9.6	10.0	9.8	9.8	11.2	10.2	9.8	11.2	10.0	10.0
Colour mg/l Pt	45	45	50	60	50	60	60	60	70	60	50	60	45	50	50
Conductance /u S	360	360	360	370	390	390	410	410	400	410	400	400	400	410	430
Odor /cold/	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P
pH	7.4	7.5	7.5	7.6	7.5	7.5	7.8	7.8	7.8	7.8	7.8	7.9	7.8	7.8	7.8
DO mg/l O_2	7.8	7.9	7.1	8.2	7.9	7.9	8.1	8.0	8.0	8.3	8.3	8.2	7.3	7.1	8.2
Saturation %	67	68	61	70	69	69	71	70	70	75	73	72	66	62	72
BOD_5 mg/l O_2	3.2	3.9	3.7	3.6	4.0	6.7	3.0	3.5	2.1	3.3	3.1	2.8	3.8	3.3	3.7
COD "	27.6	27.4	29.1	28.6	35.2	34.8	34.7	38.5	34.8	34.7	36.2	36.2	33.8	35.7	32.4
NH_3- N mg/l	0.66	0.70	0.71	0.68	0.66	1.54	0.50	0.56	0.72	0.48	0.52	0.63	0.66	0.58	0.64
NO_2- N "	0.020	0.027	0.022	0.024	0.022	0.047	0.013	0.013	0.017	0.024	0.020	0.015	0.024	0.020	0.022
NO_3- N "	1.4	1.4	1.4	1.4	1.4	1.5	1.2	1.2	1.1	1.2	1.3	1.1	1.2	1.2	1.2
Organic N "	0.96	0.96	0.90	1.2	1.14	1.65	1.32	1.13	1.32	0.93	1.05	1.20	1.34	1.26	1.20
Residue:															
Total "	458	421	375	432	448	390	438	441	402	446	442	482	425	486	432
Volatile "	167	141	137	153	150	145	170	154	174	158	162	146	173	164	155
Fixed "	291	280	238	281	298	245	268	287	228	288	280	336	252	322	277
Orthophosphate mg/l PO_4	0.255	0.230	0.237	0.245	0.257	0.245	0.237	0.150	0.185	0.205	0.137	0.172	0.167	0.050	0.252
Total Phosphate "	0.874	0.710	0.734	0.920	0.874	0.920	0.890	0.880	0.874	0.874	0.904	1.010	0.690	0.770	0.804
Phenols mg/l	0.006	0.007	0.007	0.009	0.012	0.011	0.005	0.007	0.008	0.007	0.009	0.009	0.005	0.005	0.004

Enclosure 64 (continued)

Sampling stations	5			6			7			8			9		
Analysis	l	m	r	l	m	r	l	m	r	l	m	r	l	m	r
Date	10.8	10.8	10.8	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
Hour	21^{40}	21^{45}	22^{00}	2^{10}	2^{30}	2^{50}	5^{30}	5^{35}	5^{10}	7^{15}	7^{20}	7^{25}	8^{00}	8^{05}	8^{10}
Temp. of air °C	10	10	10	8	8	8	8	8	8	8	8	8	10	10	10
Temp. of water °C	11.2	11.0	11.0	13.0	12.0	11.4	9.8	9.7	9.8	10.2	10.0	9.9	9.6	10.0	9.9
Colour mg/l Pt	70	60	60	60	60	70	60	60	70	60	60	70	60	50	60
Conductance /uS	430	440	440	400	400	410	350	360	360	350	360	350	360	360	350
Odor /cold/	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P
pH	7.8	7.8	7.8	7.8	7.7	7.8	7.8	7.9	7.9	7.8	7.8	7.8	7.7	7.8	7.7
DO mg/l O_2	7.1	8.2	8.3	9.7	8.3	8.6	8.9	8.7	8.2	8.8	8.1	8.3	6.6	8.4	6.8
Saturation %	64	74	75	91	77	78	78	76	72	77	71	73	58	74	60
BOD_5 mg/l O_2	2.4	3.1	2.7	4.7	5.3	3.9	3.2	3.1	3.4	3.2	3.3	3.1	2.9	3.0	3.0
COD mg/l O_2	32.9	35.7	34.9	31.9	44.6	34.9	36.6	33.8	32.9	35.7	37.6	31.0	32.0	37.6	31.5
NH_3 - N mg/l	0.59	0.54	0.50	0.38	0.56	0.60	0.38	0.38	0.38	0.34	0.36	0.40	0.32	0.24	0.32
NO_2 - N "	0.027	0.024	0.020	0.023	0.026	0.024	0.023	0.022	0.031	0.020	0.022	0.012	0.023	0.023	0.028
NO_3 - N "	1.3	1.2	1.3	1.1	1.1	1.0	1.1	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.3
Organic N "	1.37	1.24	1.21	1.40	1.34	1.05	1.17	1.27	1.23	1.47	1.37	1.40	1.17	1.40	1.43
Residue:															
Total mg/l	492	428	463	417	446	441	394	433	419	452	456	422	413	423	470
Volatile "	187	152	149	134	176	158	135	158	171	156	166	169	146	150	180
Fixed "	305	276	314	283	270	283	259	275	248	296	290	253	267	273	290
Orthophosphate mg/l PO_4	0.125	0.137	0.150	0.070	0.057	0.305	0.185	0.230	0.245	0.195	0.205	0.310	0.190	0.220	0.200
Total Phosphate "	0.960	0.820	0.814	0.900	1.160	1.064	0.784	0.934	1.230	0.815	1.100	0.800	0.844	0.874	1.080
Phenols mg/l	0.005	0.007	0.006	0.008	0.007	0.008	0.009	0.008	0.008	0.008	0.007	0.007	0.007	0.007	0.008

Physical and Chemical Analysis of Vistula Tributaries Water
October 8 - 9, 1974

Sampling stations / Analysis	Kurówka	Wieprz	Zagożdżonka	Head Water	Radomka	Pilica	Jeziorka
	I	II	III	IV	V	VI	VII
Date	10.8	10.8	10.8	10.8	10.8	10.8	10.9
Hour	3^{15}	6^{30}	14^{10}	14^{50}	16^{00}	22^{15}	5^{50}
Temp. of air °C	6	8	12	12	11	10	8
Temp. of water °C	12.0	9.2	10.2	22.4	9.8	11.2	9.6
Colour mg/l Pt	70	80	80	50	60	50	60
Conductance /u S	470	330	360	400	360	320	340
Odor /cold/	1 P	1 P	1 P	1 P	1 S	1 P	1 P
pH	7.2	7.5	7.5	7.8	7.7	8.0	7.4
DO mg/l O_2	7.3	6.4	6.1	8.1	6.4	8.6	8.1
Saturation %	68	55	53	90	56	78	71
BOD_5 mg/l O_2	11.2	2.1	1.1	3.0	4.6	2.0	5.3
COD "	33.8	31.0	37.3	31.0	37.3	22.1	37.1
NH_3- N mg/l	9.1	0.56	0.60	0.44	1.04	0.40	0.56
NO_2- N "	0.290	0.023	0.014	0.021	0.022	0.005	0.030
NO_3- N "	2.8	0.33	1.9	1.3	0.34	0.21	0.66
Organic N "	6.7	1.05	1.04	1.04	1.47	1.00	1.30
Residue:							
Total "	393	293	311	408	362	300	452
Volatile "	172	152	139	175	174	138	172
Fixed "	221	141	172	233	188	162	280
Orthophosphate mg/l PO_4	0.277	0.300	0.197	0.225	0.190	0.150	0.350
Total Phosphate "	0.574	0.864	0.494	1.08	1.06	0.750	0.620
Phenols mg/l	0.012	0.007	0.010	0.005	0.008	0.009	0.008

Enclosure 66

Physical and Chemical Analysis of Vistula Water
November 13 - 15 1974

Sampling stations / Analysis		1	2	3			4			4a			5	6	7	8			9
				l	m	r	l	m	r	l	m	r				l	m	r	
Date		11.13	11.13	11.14			11.14			11.14			11.14	11.14	11.15	11.15			11.15
Hour		11^{00}	12^{45}	12^{30}	12^{40}	12^{50}	13^{10}	13^{20}	13^{30}	15^{30}	16^{00}	16^{10}	20^{25}	21^{00}	6^{10}	8^{25}	8^{30}	8^{35}	9^{35}
Temp. of air	°C	14	16	14	14	14	14	14	14	11	11	11	5	4	2	4	4	4	6
Temp. of water	°C	5.0	5.0	4.4	4.2	4.2	5.2	4.4	4.2	4.8	4.4	4.2	4.2	4.4	4.2	4.2	4.0	4.0	4.2
Colour	mg/l Pt	45	45	40	40	45	40	45	45	40	40	40	40	40	40	40	40	40	40
Conductance	µS	482	440	510	490	490	500	490	460	480	500	480	500	400	450	460	460	460	450
Odor /cold/		1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P
pH		7.5	7.5	7.8	7.9	7.9	7.8	7.9	7.9	7.8	7.8	7.4	7.8	7.3	7.5	7.9	7.9	7.9	7.7
DO	mg/l O_2	10.1	10.2	10.6	10.5	10.6	10.6	10.8	11.1	10.7	10.6	10.7	10.4	10.4	11.2	7.3	7.2	9.1	10.2
Saturation	%	78	79	80	79	80	82	81	84	83	80	81	79	79	85	57	54	69	77
BOD_5	mg/l O_2	1.9	2.3	0.7	1.7	1.9	1.2	1.3	1.8	1.3	1.9	2.6	1.0	1.5	1.6	1.5	1.5	1.3	1.8
COD	mg/l O_2	16.1	15.1	19.7	23.8	24.3	16.1	21.1	27.1	19.3	21.6	18.4	22.3	14.7	23.0	23.0	23.9	24.8	19.3
NH_3 - N	mg/l	0.71	1.24	0.70	0.60	0.64	0.65	0.64	0.51	0.38	0.34	0.36	0.56	0.44	0.46	0.43	0.51	0.48	0.48
NO_2 - N	"	0.014	0.011	0.011	0.012	0.011	0.012	0.012	0.014	0.014	0.009	0.010	0.016	0.013	0.008	0.010	0.008	0.009	0.008
NO_3 - N	"	1.1	1.2	1.0	0.88	0.88	0.95	0.65	0.64	0.80	0.82	0.76	0.78	0.65	0.94	0.92	0.92	0.82	0.93
Organic N	"	0.91	1.27	1.14	1.46	1.19	1.10	1.37	1.33	1.30	1.37	2.32	1.76	1.63	4.30	1.43	1.50	1.52	1.43
Residue:																			
Total	mg/l	401	386	410	398	390	403	406	379	407	412	402	393	346	387	393	389	389	383
Volatile	"	111	100	128	126	128	128	134	119	132	133	134	87	106	122	126	118	135	118
Fixed	"	290	286	282	272	262	275	272	260	275	279	268	305	240	265	267	271	254	265
Orthophosphate	mg/l PO_4	0.235	0.260	0.260	0.272	0.250	0.295	0.295	0.330	0.362	0.280	0.345	0.330	0.247	0.245	0.177	0.102	0.107	0.345
Total Phosphate	"	0.510	0.685	0.540	0.535	0.600	0.530	0.520	0.535	0.590	0.530	0.640	0.585	0.520	0.595	0.530	0.500	0.545	0.590

Physical and Chemical Analysis of Vistula Tributaries Water
November 13 - 15 1974

Sampling stations / Analysis	Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
	I	II	III	IV	V	VI	VII
Date	11.13	11.13	11.14	11.14	11.14	11.14	11.15
Hour	12^{15}	14^{00}	12^{15}	13^{00}	13^{55}	20^{35}	6^{20}
Temp. of air °C	14	16	13	14	14	4	2
Temp. of water °C	6.8	8.2	5.4	21.4	5.2	4.2	5.4
Colour mg/l Pt	50	70	80	40	45	60	40
Conduotanoe /uS	540	385	260	510	400	330	520
Odor /oold/	1P	1P	1P	1P	1P	1F	1F
pH	7.2	7.7	7.0	7.8	7.3	7.8	7.5
DO mg/l O_2	8.1	11.4	6.6	9.6	8.7	10.9	10.2
Saturation %	66	96	51	106	67	82	79
BOD_5 mg/l O_2	9.2	2.2	0.5	0.5	2.4	2.6	5.6
COD mg/l O_2	38.6	34.5	27.6	19.7	31.3	22.1	33.5
NH_3 - N mg/l	4.50	0.44	0.52	0.62	1.10	0.44	0.54
NO_2 - N "	0.220	0.007	0.015	0.014	0.038	0.009	0.030
NO_3 - N "	2.7	0.40	0.32	0.86	0.45	0.39	1.3
Organic N "	6.65	1.40	1.76	1.56	2.69	2.44	3.47
Residue:							
Total mg/l	468	319	231	415	328	275	448
Volatile "	162	119	87	129	88	81	155
Fixed "	306	200	144	286	240	194	293
Orthophosphate mg/l PO_4	0.355	0.230	0.367	0.342	0.392	0.362	0.377
Total Phosphate "	1.03	0.560	0.520	0.490	0.845	0.435	0.790

Physical and Chemical Analysis of Vistula Water

December 3 - 5 1974

Enclosure 68

Sampling stations / Analysis		1	2	3			4			4a	5	6	7	8	9		
				I	II	III	I	II	III						I	II	III
Date		12.3	12.3		12.4			12.4		12.4	12.4	12.4	12.5	12.5		12.5	
Hour		11^{05}	11^{10}	11^{40}	11^{43}	11^{30}	12^{15}	12^{20}	12^{23}	15^{00}	20^{00}	20^{30}	6^{20}	8^{25}	10^{10}	10^{15}	10^{20}
Temp. of air	°C	8	8	5	5	5	5	5	5	4	0	0	2	4	4	4	4
Temp. of water	°C	5.0	6.0	4.0	3.8	3.8	6.2	4.0	4.0	5.6	4.6	4.2	4.3	4.3	4.3	4.2	4.2
Turbicidity	mg/l SiO_2	30	33	36	30	30	23	30	20	26	30	40	30	30	36	33	33
Colour	mg/l Pt	40	40	40	40	45	45	45	45	45	45	45	50	40	45	45	45
Conductance	/µS	370	370	360	340	340	360	340	340	340	340	300	300	310	310	320	320
Odor /cold/		1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P
pH		7.9	7.9	8.0	8.0	8.0	8.0	8.1	8.1	7.9	7.9	8.0	8.0	8.0	7.9	8.0	8.1
DO	mg/l O_2	11.5	10.3	10.4	10.1	10.0	9.9	9.3	11.3	10.6	8.8	10.3	11.0	9.3	8.7	9.1	9.0
Saturation	%	89	82	79	76	76	79	74	86	84	68	78	83	71	66	69	68
BOD_5	mg/l O_2	3.0	2.3	2.1	2.2	1.7	2.3	2.1	2.0	2.2	1.8	1.9	1.9	2.9	2.1	2.0	2.1
COD	mg/l O_2	21.1	24.1	21.2	21.2	17.3	20.0	22.0	19.1	26.4	18.2	18.2	20.0	21.6	28.2	25.0	18.6
NH_3 - N	mg/l	1.06	1.38	1.07	0.96	0.97	1.03	0.95	0.93	1.18	0.98	0.90	0.76	0.74	0.74	0.82	0.84
NO_2 - N	"	0.010	0.013	0.004	0.005	0.008	0.009	0.006	0.003	0.012	0.007	0.008	0.004	0.007	0.005	0.008	0.003
NO_3 - N	"	0.81	0.92	0.83	0.92	0.85	0.88	0.83	0.86	0.88	0.83	0.89	0.81	0.93	0.91	0.86	0.83
Organic N	"	1.07	1.11	1.30	1.30	1.30	0.86	1.26	1.11	1.30	1.17	1.36	0.64	1.26	1.43	1.33	1.37
Residue:																	
Total	mg/l	447	445	433	448	442	431	423	413	402	412	397	407	406	413	419	408
Volatile	"	134	142	137	138	147	138	134	139	142	134	125	143	123	127	138	134
Fixed	"	313	303	318	310	295	343	291	274	260	278	272	264	281	286	281	274
Orthophosphate	mg/l PO_4	0.232	0.247	0.300	0.242	0.230	0.302	0.227	0.300	0.263	0.272	0.235	0.305	0.310	0.292	0.317	0.295
Total Phosphate	"	0.410	0.310	0.490	0.430	0.380	0.493	0.390	0.360	0.710	0.500	0.310	0.430	0.330	0.450	0.300	0.390

Enclosure 69

Physical and Chemical Analysis of Vistula Tributaries Water
December 3 - 5 1974

Sampling stations / Analysis		Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
		I	II	III	IV	V	VI	VII
Date		12.3	12.3	12.4	12.4	12.4	12.4	12.5
Hour		12^{50}	13^{30}	11^{30}	11^{55}	13^{10}	20^{20}	6^{35}
Temp. of air	°C	8	8	5	5	5	0	2
Temp. of water	°C	8.8	6.0	6.0	22.0	5.3	4.4	5.4
Turbicidity	mg/l SiO_2	23	12	20	43	33	23	26
Colour	mg/l Pt	45	35	60	40	40	50	50
Conductance	/uS	610	420	360	560	400	310	520
Odor /cold/		1P	1P	1P	1P	2S	1P	1P
pH		7.5	8.1	7.6	8.0	7.6	8.1	7.5
DO	mg/l O_2	8.6	11.9	8.9	8.8	7.7	11.3	10.1
Saturation	%	74	95	71	99	60	86	78
BOD_5	mg/l O_2	4.0	2.5	1.7	1.9	4.9	4.6	5.3
COD	mg/l O_2	19.6	22.8	19.1	17.3	40.5	19.1	32.8
NH_3 - N	mg/l	7.20	0.44	0.64	1.21	1.46	0.44	0.63
NO_2 - N	"	0.200	0.007	0.026	0.024	0.024	0.005	0.020
NO_3 - N	"	3.0	0.67	1.9	0.91	0.46	0.68	[illegible]
Organic N	"	4.76	1.02	1.50	0.73	1.76	1.37	1.59
Residue:								
Total	mg/l	468	347	319	441	332	281	449
Volatile	"	156	134	125	133	109	103	158
Fixed	"	312	213	194	308	223	178	291
Orthophosphate	mg/l PO_4	0.180	0.255	0.330	0.315	0.392	0.335	0.510
Total Phosphate	"	0.435	0.370	0.480	0.530	1.06	0.490	0.770

Physical and Chemical Analysis of Vistula Water

January 6 - 8, 1975

Sampling stations / Analysis		1 l	1 m	1 r	2	3	4	4a l	4a m	4a r	5	6	7	8	9
Date		1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8
Hour		12^{15}	12^{35}	13^{00}	14^{30}	14^{40}	15^{25}	17^{35}	17^{50}	18^{10}	21^{45}	22^{35}	5^{30}	7^{45}	8^{50}
Temp. of air	°C	8	8	8	9	5	5	4	4	4	2	0	-1	0	0
Temp. of water	°C	3.2	3.2	3.3	3.6	4.8	8.2	4.0	4.0	4.8	4.8	4.0	3.8	3.8	3.8
Turbicidity	mg/l SiO_2	78	61	61	76	23	43	66	64	58	52	55	52	52	50
Colour	mg/l Pt	45	45	50	50	50	60	45	45	45	45	45	50	45	45
Conductance	/uS	450	440	440	430	410	340	410	400	400	400	390	330	330	340
Odor /cold/		1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P
pH		8.0	8.0	8.0	8.0	7.8	7.8	8.0	8.1	8.0	8.0	8.1	8.0	8.0	8.0
DO	mg/l O_2	11.3	12.1	11.4	12.0	10.5	10.3	8.9	9.2	9.4	11.4	12.0	11.3	11.4	11.0
Saturation	%	83	89	84	91	82	86	68	70	73	89	91	86	86	83
BOD_5	mg/l O_2	2.7	2.6	2.6	2.4	2.7	2.1	2.2	2.6	2.8	2.4	3.1	2.6	3.0	3.5
COD	mg/l O_2	20.5	17.5	18.7	21.7	17.9	22.1	16.2	22.5	20.5	20.0	20.9	17.8	20.0	19.5
NH_3 - N	mg/l	0.68	0.82	0.85	1.32	0.37	0.30	0.57	0.67	0.64	0.58	0.58	0.65	0.58	0.53
NO_2 - N	"	0.009	0.013	0.009	0.026	0.020	0.013	0.009	0.011	0.010	0.013	0.012	0.010	0.011	0.013
NO_3 - N	"	0.88	1.0	1.0	1.34	1.34	0.97	1.1	1.0	1.0	1.34	1.0	1.0	1.1	1.0
Organic N	"	0.73	0.70	0.70	1.16	0.73	0.58	0.58	0.73	0.80	0.55	0.90	0.52	0.74	0.90
Residue:															
Total	mg/l	418	384	363	379	358	298	376	350	378	359	344	344	333	356
Voletile	"	151	108	112	122	115	101	125	125	126	116	109	112	101	125
Fixed	"	267	276	251	257	243	197	251	225	252	243	235	232	232	231
Orthophosphate	mg/l PO_4	0.185	0.215	0.220	0.287	0.250	0.175	0.232	0.245	0.240	0.245	0.310	0.257	0.260	0.250
Total Phosphate	"	0.380	0.425	0.485	0.527	0.280	0.272	0.572	0.515	0.457	0.422	0.370	0.415	0.377	0.445

Enclosure 71

Physical and Chemical Analysis of Vistula Tributaries Water

January 6 - 8, 1975

Sampling stations	Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
Analysis	I	II	III	IV	V	VI	VII
Date	1.6	1.6	1.7	1.7	1.7	1.7	1.8
Hour	14^{00}	15^{05}	14^{20}	14^{50}	16^{15}	22^{00}	5^{40}
Temp. of air °C	9	8	4	5	5	1	-1
Temp. of water °C	7.4	4.0	5.2	22.8	5.0	4.2	3.8
Turbicidity mg/l SiO_2	30	12	10	46	23	10	30
Colour mg/l Pt	45	45	50	45	50	60	70
Conductance /uS	550	410	360	410	350	270	380
Odor /cold/	1P	1P	1P	1P	1P	1P	1P
pH	7.7	8.3	7.9	7.9	7.8	8.0	7.7
DO mg/l O_2	9.5	12.0	10.1	10.5	9.2	11.6	10.8
Saturation %	76	91	78	121	71	88	81
BOD_5 mg/l O_2	6.3	1.9	2.4	2.5	3.6	1.5	4.2
COD mg/l O_2	14.5	17.8	21.3	14.9	43.0	13.6	23.8
NH_3 - N mg/l	5.84	0.40	0.39	0.42	0.63	0.14	0.36
NO_2 - N "	0.235	0.009	0.029	0.021	0.048	0.010	0.026
NO_3 - N "	-	-	-	-	-	-	-
Organic N "	5.46	0.80	1.34	0.64	1.03	0.48	1.19
Residue:							
Total mg/l	419	320	321	346	301	219	406
Volatile "	161	121	117	107	119	78	166
Fixed "	258	199	204	239	182	141	240
Orthophosphate mg/l PO_4	0.242	0.280	0.262	0.240	0.265	0.190	0.395
Total Phosphate "	0.475	0.437	0.375	0.422	0.542	0.322	0.630

Enclosure 72

Physical and Chemical Analysis of Vistula Water

January 20 - 22, 1975

Sampling stations / Analysis		1	2			3			4			4a			5	6	7	8	9
			l	m	r	l	m	r	l	m	r	l	m	r					
Date		1.20	1.20	1.20	1.20	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.22	1.22	1.22
Hour		11^{10}	12^{30}	12^{35}	12^{45}	11^{45}	12^{00}	12^{10}	12^{40}	12^{50}	13^{00}	15^{10}	15^{20}	15^{30}	20^{10}	22^{40}	6^{20}	8^{25}	10^{00}
Temp. of air	°C	4	5	3	3	2	2	2	2	2	2	1	1	1	1	0	0	0	3
Temp. of water	°C	3.0	3.0	2.0	4.0	2.2	2.2	2.2	3.0	2.4	2.2	2.8	2.4	2.2	2.0	2.2	2.8	2.7	2.8
Turbicidity	mg/l SiO_2	33	47	50	30	23	30	23	30	23	23	26	30	23	26	30	23	30	23
Colour	mg/l Pt	40	40	40	40	40	40	40	40	40	40	40	40	40	50	45	40	40	45
Conductance	/uS	530	550	540	550	530	520	500	500	500	495	495	510	510	500	490	400	410	410
Odor /cold/		1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P
pH		7.6	7.5	7.5	7.4	7.2	7.4	7.4	7.2	7.4	7.4	7.6	7.6	7.7	6.8	7.2	7.0	6.8	7.6
DO	mg/l O_2	10.7	10.8	10.4	10.2	12.2	11.5	12.0	12.9	11.9	12.1	11.2	11.8	12.0	11.7	12.2	12.3	11.6	11.7
Saturation	%	79	79	75	77	88	83	86	95	86	87	83	85	86	84	88	91	86	87
BOD_5	mg/l O_2	2.7	2.4	3.2	3.4	2.5	1.6	1.8	1.8	2.1	1.7	3.5	2.1	2.5	2.0	1.9	2.7	3.0	3.0
COD	mg/l O_2	12.2	13.6	13.6	13.1	20.5	17.8	13.6	15.4	16.6	18.3	19.0	18.6	18.3	18.6	14.1	16.6	17.0	15.5
NH_3 - N	mg/l	0.68	0.70	0.71	0.98	0.68	0.74	0.76	0.76	0.82	0.76	0.85	0.92	0.88	0.82	0.64	0.56	0.53	0.69
NO_2 - N	"	0.006	0.007	0.007	0.015	0.006	0.007	0.007	0.007	0.007	0.007	0.009	0.006	0.009	0.007	0.006	0.006	0.006	0.009
NO_3 - N	"	0.76	0.87	0.88	0.89	0.76	0.87	0.76	0.88	0.88	0.88	0.88	0.89	0.88	0.89	0.88	0.88	0.90	0.90
Organic N	"	1.04	0.90	0.90	0.80	0.83	0.90	0.90	0.64	0.54	-	0.64	0.52	0.62	-	0.44	0.52	0.61	0.76
Residue:																			
Total	mg/l	422	404	408	416	404	412	428	416	408	415	416	414	402	407	378	377	385	
Volatile	"	128	138	135	128	117	136	131	148	134	128	132	133	127	132	105	113	114	
Fixed	"	294	296	273	288	287	276	297	268	274	287	284	281	275	275	273	264	271	
Orthophosphate	mg/l PO_4	0.220	0.190	0.217	0.245	0.182	0.205	0.182	0.200	0.250	0.230	0.200	0.230	0.220	0.245	0.195	0.222	0.195	0.212
Total Phosphate	"	0.302	0.330	0.310	0.345	0.372	0.400		0.357	0.362	0.325	0.445	0.322	0.352	0.317	0.295	0.357	0.337	0.385

Enclosure 73

Physical and Chemical Analysis of Vistula Tributaries Water

January 20 - 22, 1975

Sampling stations		Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
Analysis		I	II	III	IV	V	VI	VII
Date		1.20	1.20	1.21	1.21	1.21	1.21	1.22
Hour		12^{20}	13^{30}	11^{30}	12^{30}	13^{20}	22^{20}	6^{35}
Temp. of air	°C	5	5	2	4	2	0	0
Temp. of water	°C	8.2	2.2	3.2	22.4	2.6	2.4	3.0
Turbicidity	mg/l SiO_2	17	5	20	30	30	17	23
Colour	mg/l Pt	40	45	60	40	50	50	45
Conductance	/uS	540	420	380	510	400	300	440
Odor /cold/		1P	1P	1P	1P	1P	1P	2S
pH		7.0	7.6	7.3	7.6	7.4	7.6	6.9
DO	mg/l O_2	7.4	12.5	8.3	9.7	9.2	12.5	11.0
Saturation	%	62	90	61	109	68	90	81
BOD_5	mg/l O_2	3.8	2.8	1.6	2.0	6.4	3.3	6.2
COD	mg/l O_2	16.0	23.3	15.1	17.8	32.0	18.9	30.6
NH_3 - N	mg/l	6.10	0.27	0.58	0.86	1.52	0.50	0.46
NO_2 - N	"	0.205	0.007	0.021	0.013	0.032	0.005	0.030
NO_3 - N	"	-	-	-	-	-	-	-
Organic N	"	5.00	2.09	0.82	0.52	1.72	0.83	1.29
Residue:								
Total	mg/l	415	311	333	432	336	270	444
Volatile	"	162	129	127	113	118	82	136
Fixed	"	253	182	206	319	218	188	208
Orthophosphate	mg/l PO_4	0.362	0.277	0.247	0.220	0.337	0.212	0.437
Total Phosphate	"	-	0.415	0.310	0.377	0.800	0.265	0.692

Enclosure 74

Physical and Chemical Analysis of Vistula Water

February 3 - 5, 1975

Sampling stations / Analysis		1	2	3			3a1	4			4a			5			6	7	8	9
				l	m	r		l	m	r	l	m	r	l	m	r				
Date		2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5
Hour		11^{30}	12^{30}	8^{10}	8^{15}	8^{20}	9^{40}	9^{10}	9^{20}	9^{30}	12^{20}	12^{40}	13^{00}	18^{10}	18^{30}	18^{45}	19^{30}	5^{50}	8^{45}	10^{0}
Temp. of air	°C	-2	-3	-4	-4	-4	-4	-4	-4	-4	-2	-2	-2	-5	-5	-5	-5	-5	-3	-3
Temp. of water	°C	2.0	2.0	0.8	1.2	0.6	1.0	1.4	1.2	0.8	2.0	0.6	0.6	1.4	1.0	0.8	1.0	0.8	0.8	0.8
Turbicidity	mg/l SiO_2	15	23	15	17	10	15	17	20	15	17	17	17	15	17	15	17	15	17	15
Colour	mg/l Pt	40	40	40	40	40	40	40	40	40	40	40	40	45	40	45	50	45	45	50
Conductance	µS	560	575	570	570	570	550	570	500	550	540	560	560	550	560	550	550	490	490	480
Odor /cold/		1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P
pH		7.5	7.4	7.7	7.8	7.7	7.6	7.7	7.8	7.7	7.8	7.8	7.7	7.8	7.8	7.6	7.6	7.6	7.6	7.7
DO	mg/l O_2	12.0	12.1	13.0	13.0	13.1	12.6	13.0	13.0	13.0	12.4	13.0	13.1	12.8	13.0	13.1	13.0	13.0	13.4	13.
Saturation	%	86	87	91	91	92	89	91	91	91	89	91	91	90	91	91	91	91	94	95
BOD_5	mg/l O_2	2.2	2.0	2.2	2.0	2.3	2.3	2.1	2.0	1.9	1.7	2.0	1.7	1.9	2.2	2.1	2.4	3.8	8.4	2.
COD	mg/l O_2	14.1	14.5	15.5	15.0	12.6	16.6	15.5	16.1	17.6	17.3	17.6	17.1	12.8	17.3	15.4	15.4	14.6	14.5	18.
NH_3 - N	mg/l	1.09	1.34	1.08	0.97	1.02	0.96	1.10	1.13	1.10	1.12	1.06	1.02	0.97	0.99	0.96	0.96	0.96	0.92	0.
NO_2 - N	"	0.006	0.010	0.006	0.006	0.006	0.007	0.006	0.006	0.006	0.010	0.006	0.006	0.007	0.006	0.006	0.006	0.006	0.006	0.
NO_3 - N	"	0.88	0.87	0.85	0.87	0.80		0.80	0.80	0.81	0.81	1.02	0.81	0.76	0.90	0.73	0.73	0.83	0.92	0.
Organic N	"	1.26	1.52	1.20	1.14	1.28	1.37	1.00	0.98	1.11	1.20	1.23	1.11	1.20	1.18	1.32	1.13	1.10	1.42	1.2
Residue:																				
Total	mg/l	456	470	452	443	446	433	453	457	451	429	455	458	447	448	450	447	435	442	42
Volatile	"	142	144	121	143	149	122	150	154	144	128	168	152	127	138	150	148	153	112	13
Fixed	"	314	326	331	300	297	311	303	303	307	301	287	306	320	310	300	299	282	300	292
Orthophosphate	mg/l PO_4	0.245	0.295	0.307	0.252	0.245	0.275	0.305	0.255	0.295	0.255	0.195	0.195	0.205	0.190	0.132	0.180	0.232	0.220	0.
Total Phosphate	"	0.267	0.345	0.315	0.292	0.303	0.337	0.337	0.315	0.330	0.370	0.303	0.342	0.325	0.335	0.430	0.330	0.415	0.320	0.

Enclosure 75

Physical and Chemical Analysis of Vistula Tributaries Water

February 3 - 5, 1975

Sampling stations	Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
Analysis	I	II	III	IV	V	VI	VII
Date	2.3	2.3	2.4	2.4	2.4	2.4	2.5
Hour	12^{05}	13^{10}	8^{00}	8^{30}	10^{05}	19^{00}	6^{10}
Temp. of air °C	-3	-2	-4	-4	-4	-5	-5
Temp. of water °C	5.5	0.2	1.6	18.0	1.0	0.8	2.0
Turbicidity mg/l SiO_2	10	7	12	20	36	12	30
Colour mg/l Pt	40	40	50	40	60	60	50
Conductance /uS	640	420	400	510	410	320	460
Odor /cold/	2P	1P	1P	1P	1P	1P	1P
pH	7.1	7.4	7.4	7.6	7.3	7.5	7.0
DO mg/l O_2	10.6	12.7	9.9	11.5	10.8	13.0	12.8
Saturation %	92	87	71	120	76	91	92
BOD_5 mg/l O_2	4.9	2.6	1.1	0.2	0.8	4.8	7.3
COD mg/l O_2	17.3	19.4	15.4	16.5	33.0	15.9	31.3
NH_3 - N mg/l	12.9	0.30	0.51	1.06	2.00	0.30	0.76
NO_2 - N "	0.280	0.005	0.031	0.020	0.025	0.006	0.020
NO_3 - N "	4.97	0.60	3.15	1.15	0.57	0.90	1.34
Organic N "	8.12	1.40	1.43	1.25	2.60	1.37	1.83
Residue:							
Total mg/l	495	347	360	460	354	271	445
Volatile "	185	143	131	163	124	78	168
Fixed "	310	204	229	297	230	193	277
Orthophosphate mg/l PO_4	0.280	0.305	0.280	0.250	0.300	0.212	0.475
Total Phosphate "	0.385	0.337	0.322	0.342	0.800	0.285	0.685

Enclosure 76

Physical and Chemical Analysis of Vistule Water

March 10 - 12, 1975

Sampling stations / Analysis		1	2	3			4			4a			5	6			7	8	9
				l	m	r	l	m	r	l	m	r		l	m	r			
Date		3.10	3.10	3.11	3.11	3.11	3.11	3.11	3.11	3.11	3.11	3.11	3.11	3.11	3.11	3.11	3.12	3.12	3.12
Hour		11^{30}	12^{30}	8^{15}	8^{20}	8^{25}	9^{00}	9^{05}	9^{10}	12^{30}	12^{35}	12^{40}	18^{10}	19^{10}	19^{15}	19^{20}	6^{55}	10^{00}	11^{30}
Temp. of air	°C	15	17	10	10	10	11	11	11	12	12	12	9	8	8	8	5	6	7
Te of water	°C	8.1	8.2	8.2	8.2	8.2	12.2	10.0	8.2	10.6	9.8	8.4	10.6	10.6	[illegible].0	9.8	9.2	9.2	9.2
Turbicidity	mg/l SiO_2	10	7	14	14	14	17	14	14	14	14	14	12	10	14	10	17	20	20
Colour	mg/l Pt	25	30	35	35	35	35	35	35	35	30	30	30	30	30	30	30	30	30
Conductance	/uS	724	720	610	510	620	630	630	620	620	630	620	640	600	580	580	520	520	530
Odor /cold/		1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P
pH		7.3	7.5	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.8	7.7	7.9	7.9	7.9	7.8	7.7	7.7
DO	mg/l O_2	10.2	10.6	10.3	10.4	10.3	9.8	10.0	10.0	9.9	9.6	10.3	10.0	12.2	12.2	12.0	10.3	10.3	10.1
Saturation	%	85	89	86	87	86	90	87	84	89	84	88	90	110	107	105	98	98	87
BOD_5	mg/l O_2	2.3	2.6	2.9	2.8	2.9	3.7	2.9	2.1	2.3	3.4	2.9	3.9	3.0	3.0	2.8	2.5	2.9	4.1
COD	mg/l O_2	27.6	24.2	15.0	17.4	16.0	17.8	15.7	17.1	17.0	12.7	14.1	16.5	13.2	15.2	15.9	15.1	16.9	17.1
NH_3 - N	mg/l	1.47	1.72	1.34	1.28	1.34	1.34	1.38	1.34	1.28	1.26	1.26	1.19	0.94	0.98	0.98	0.96	0.96	0.98
NO_2 - N	"	0.012	0.023	0.025	0.020	0.020	0.045	0.021	0.021	0.038	0.028	0.023	0.047	0.028	0.030	0.030	0.032	0.034	0.038
NO_3 - N	"	0.75	0.83	0.90	0.80	0.90	1.02	0.90	0.90	0.93	0.97	0.87	0.92	0.93	0.93	0.95	0.76	0.83	0.66
Organic N	"	0.52	0.71	0.54	0.51	0.32	0.44	0.56	0.49	0.44	0.49	0.51	0.28	0.56	0.68	0.62	1.11	1.02	0.96
Residue:																			
Total	mg/l	483	530	467	404	448	494	538	567	452	457	514	461	437	429	420	448	445	430
Orthophosphate	mg/l PO_4	0.200	0.350	0.330	0.330	0.305	0.280	0.302	0.342	0.250	0.267	0.305	0.280	0.255	0.167	0.250	0.232	0.230	0.245

Enclosure 77

Physical and Chemical Analysis of Vistula Tributaries Water

March 10 - 12, 1975

Sampling stations		Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
Analysis		I	II	III	IV	V	VI	VII
Date		3.10	3.10	3.11	3.11	3.11	3.11	3.12
Hour		12^{10}	13^{00}	7^{45}	8^{35}	10^{05}	18^{35}	7^{10}
Temp. of air	°C	17	16	10	19	12	9	5
Temp. of water	°C	11.8	7.9	8.4	19.8	9.6	9.6	10.0
Turbicidity	mg/l SiO_2	17	6	20	14	14	10	30
Colour	mg/l Pt	30	35	45	30	40	25	60
Conductance	/uS	760	450	430	630	360	370	450
Odor /cold/		2S	1P	1P	1P	1P	1P	2S
pH		7.3	7.7	7.3	7.6	7.5	7.9	7.0
DO	mg/l O_2	9.4	9.3	8.3	8.7	7.8	10.0	8.8
Saturation	%	86	78	69	95	68	87	77
BOD_5	mg/l O_2	7.5	2.1	2.4	3.9	4.5	2.6	8.1
COD	mg/l O_2	34.2	29.4	13.2	14.3	20.9	12.4	35.7
NH_3 - N	mg/l	7.89	0.32	0.67	1.22	1.25	0.22	0.76
NO_2 - N	"	0.240	0.012	0.107	0.082	0.038	0.010	0.060
NO_3 - N	"	3.5	0.30	4.3	1.10	0.11	0.64	0.85
Organic N	"	6.93	0.50	0.70	0.93	0.89	0.77	1.08
Residue:								
Total	mg/l	528	306	328	446	261	262	401
Orthophosphate	mg/l PO_4	0.270	0.240	0.305	0.355	0.377	0.225	0.550

Enclosure 78

Physical and Chemical Analysis of Vistula Water

April 22 - 23, 1975

Sampling stations / Analysis		1	2	3			4			4a			5	6	7	8	9
				l	m	r	l	m	r	l	m	r					
Date		4.22	4.22	4.23	4.23	4.23	4.23	4.23	4.23	4.23	4.23	4.23	4.23	4.23	4.23	4.23	4.23
Hour		11^{30}	12^{40}	10^{20}	10^{30}	10^{45}	11^{20}	11^{30}	11^{40}	13^{00}	13^{10}	13^{20}	14^{30}	16^{00}	16^{20}	17^{00}	17^{30}
Temp. of air	°C	9	9	10	10	10	10	10	10	11	11	11	11	11	10	9	9
Temp. of water	°C	8.2	8.8	8.2	8.2	8.0	9.0	8.6	8.2	8.8	8.6	8.2	8.2	8.2	8.0	8.0	8.0
Turbicidity	mg/l SiO_2	20	17	17	20	17	20	17	17	17	20	17	17	14	20	23	20
Colour	mg/l Pt	40	40	30	35	35	30	30	30	30	30	30	30	30	35	30	30
Conductance	/uS	440	445	460	450	450	440	450	440	450	450	440	450	410	400	420	430
Odor /cold/		1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P
pH		7.5	7.2	7.3	7.3	7.3	7.5	7.5	7.5	7.2	7.2	7.2	7.6	7.6	7.7	7.7	7.5
DO	mg/l O_2	10.0	9.5	10.6	9.7	9.6	10.0	9.6	10.0	10.0	9.9	10.0	10.0	10.0	10.2	10.2	9.5
Saturation	%	84	81	89	81	80	86	82	84	86	85	84	84	84	85	85	80
BOD_5	mg/l O_2	2.0	3.9	1.7	1.8	2.3	2.3	2.1	1.7	2.5	2.5	1.8	1.5	2.0	1.4	1.8	2.3
COD	mg/l O_2	18.0	11.7	8.5	12.5	11.3	8.5	9.0	9.0	11.7	11.2	9.5	14.4	6.7	7.2	12.5	13.5
NH_3 - N	mg/l	0.39	2.21	0.44	0.44	0.44	0.41	0.36	0.36	0.44	0.51	0.51	0.46	0.29	0.31	0.28	0.28
NO_2 - N	"	0.020	0.067	0.020	0.020	0.023	0.027	0.027	0.023	0.027	0.023	0.023	0.027	0.023	0.023	0.027	0.023
NO_3 - N	"	1.1	1.4	1.3	1.5	1.5	1.5	1.3	1.3	1.3	1.6	1.5	1.5	1.1	1.3	1.1	1.1
Organic N	"	0.78	1.34	0.61	0.82	0.53	0.81	0.64	0.85	1.13	0.86	0.93	0.94	1.02	1.20	0.83	1.08
Residue:																	
Total	mg/l	353	321	423	387	366	390	351	402	335	420	398	403	303	357	417	402
Volatile	"	123	122	148	144	160	127	111	145	127	137	139	134	125	129	129	143
Fixed	"	230	199	275	243	206	263	240	257	208	283	259	269	178	228	288	259
Orthophosphate	mg/l PO_4	0.145	0.265	0.280	0.237	0.217	0.242	0.255	0.297	0.305	0.300	0.297	0.255	0.265	0.272	0.280	0.317
Total Phosphate	"	0.342	0.430	0.430	0.597	0.415	0.415	0.415	0.495	0.470	0.485	0.430	0.565	0.342	0.460	0.605	0.515

Enclosure 79

Physical and Chemical Analysis of Vistula Tributaries Water

April 22 - 23, 1975

Sampling stations / Analysis	Kurówka I	Wieprz II	Zagożdżonka III	Heated Water IV	Radomka V	Pilica VI	Jeziorka VII
Date	4.22	4.22	4.22	4.23	4.22	4.22	4.23
Hour	12^{10}	13^{30}	9^{50}	11^{00}	9^{30}	8^{30}	16^{30}
Temp. of air °C	9	9	8	10	8	8	10
Temp. of water °C	12.0	8.0	7.5	20.2	8.0	8.0	9.4
Turbicidity mg/l SiO_2	14	10	11	30	21	12	30
Colour mg/l Pt	35	50	60	35	40	30	60
Conductance /uS	560	410	390	450	405	325	510
Odor /cold/	1P	1P	1P	1P	1P	1P	1P
pH	6.8	7.4	7.4	7.5	7.4	7.5	7.3
DO mg/l O_2	9.2	9.4	8.8	9.0	7.5	10.0	9.5
Saturation %	84	79	74	98	63	84	81
BOD_5 mg/l O_2	6.7	2.2	2.6	1.0	6.4	3.6	6.1
COD mg/l O_2	17.1	18.9	19.8	13.0	26.1	12.6	32.1
NH_3 - N mg/l	8.40	0.41	0.50	0.29	1.60	0.36	0.38
NO_2 - N "	0.270	0.017	0.050	0.034	0.040	0.005	0.064
NO_3 - N "	4.0	0.45	3.0	1.4	0.54	0.50	1.3
Organic N "	7.60	1.90	1.56	1.08	1.88	0.89	1.59
Residue:							
Total mg/l	421	407	298	439	302	330	411
Volatile "	155	168	123	149	121	109	163
Fixed "	266	239	175	290	181	221	248
Orthophosphate mg/l PO_4	0.470	0.280	0.167	0.292	0.305	0.162	0.495
Total Phosphate "	0.775	0.470	0.267	0.595	0.752	0.475	0.755

Enclosure 80

Physical and Chemical Analysis of Vistula Water
May 12 - 14, 1975

Sampling stations	1			2			3			4			4a		
Analysis	l	m	r	l	m	r	l	m	r	l	m	r	l	m	r
Date	5.12	5.12	5.12	5.12	5.12	5.12	5.13	5.13	5.13	5.13	5.13	5.13	5.13	5.13	5.13
Hour	18^{55}	19^{00}	19^{10}	21^{30}	21^{35}	21^{40}	11^{00}	11^{05}	11^{10}	12^{00}	12^{05}	12^{10}	14^{45}	14^{50}	15^{00}
Temp. of air °C	15	15	15	13	13	13	14	14	14	15	15	15	18	18	18
Temp. of water °C	17.8	17.8	17.8	17.8	17.8	17.8	16.4	16.4	16.4	16.5	16.6	16.4	16.4	16.8	16.7
Turbicidity mg/l SiO_2	17	20	17	20	20	17	20	14	20	17	14	20	23	30	20
Colour mg/l Pt	30	25	25	25	25	25	40	40	40	35	35	35	30	30	30
Conductance µS	530	530	515	530	530	530	550	550	545	550	545	540	520	540	540
Odor /cold/	1P	1P	1P	1P	1P	1P	1P	1P	1P	2P	1P	1P	1P	1P	1P
pH	7.1	7.3	7.5	7.4	7.7	7.5	7.5	7.6	7.5	7.2	7.7	7.6	7.5	7.8	7.7
DO mg/l O_2	10.2	10.0	9.9	11.0	10.2	10.3	10.6	10.8	11.2	10.1	10.0	10.2	10.4	10.5	12.0
Saturation %	106	104	103	115	106	107	106	108	112	108	102	102	109	107	123
BOD_5 mg/l O_2	4.1	3.7	3.7	3.4	4.1	4.5	4.0	4.8	4.9	4.0	4.2	4.7	4.7	4.1	5.6
COD mg/l O_2	18.5	19.3	17.2	17.7	18.5	21.0	18.1	18.9	20.6	20.6	19.4	19.7	20.6	20.6	18.9
NH_3 - N mg/l	0.30	0.28	0.24	0.28	0.28	0.30	0.22	0.24	0.29	0.29	0.30	0.30	0.28	0.26	0.26
NO_2 - N "	0.025	0.025	0.025	0.025	0.025	0.025	0.047	0.033	0.033	0.037	0.033	0.033	0.042	0.030	0.030
NO_3 - N "	0.93	0.93	0.97	1.00	1.02	1.02	0.97	0.97	0.88	1.02	0.97	0.93	0.93	0.93	0.93
Organic N "	0.73	0.87	0.91	0.79	1.03	1.00	1.12	1.25	1.50	0.83	1.00	1.38	1.76	1.47	1.09
Residue:															
Total mg/l	405	395	406	418	417	416	410	400	378	393	392	403	388	394	420
Volatile "	156	154	138	112	145	139	127	134	120	126	118	142	126	125	126
Fixed "	249	241	268	306	272	277	283	266	258	267	274	261	262	269	294
Orthophosphate mg/l PO_4	0.150	0.152	0.142	0.440	0.152	0.125	0.237	0.245	0.220	0.242	0.330	0.240	0.227	0.307	0.232
Total Phosphate "	0.392	0.380	0.415	0.645	0.437	0.377	0.407	0.505	0.392	0.473	0.415	0.512	0.532	0.485	0.635

Sampling stations		5			6			7			8			9		
Analysis		l	m	r	l	m	r	l	m	r	l	m	r	l	m	r
Date		5.13	5.13	5.13	5.14	5.14	5.14	5.14	5.14	5.14	5.14	5.14	5.14	5.14	5.14	5.14
Hour		19^{30}	19^{35}	19^{45}	1^{40}	1^{50}	2^{00}	6^{30}	6^{35}	6^{40}	9^{00}	9^{05}	9^{10}	10^{20}	10^{25}	10^{30}
Temp. of air	^0C	16	16	16	15	15	15	16	16	16	20	20	20	22	22	22
Temp. of water	^0C	18,2	17.6	17.6	17.6	17.6	18.0	17.2	17.2	17.0	17.2	17.2	17.0	17.2	17.2	17.2
Turbicidity	mg/l SiO_2	14	17	14	14	14	13	13	14	13	10	8	10	12	12	11
Colour	mg/l Pt	30	30	30	30	30	35	30	30	30	25	30	25	30	30	30
Conductance	/uS	525	530	520	540	520	545	510	510	510	510	515	510	510	510	510
Odor /cold/		1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P
pH		7.8	7.9	7.9	7.9	8.0	7.9	8.5	8.5	8.3	8.5	8.5	8.5	8.6	8.5	7.3
DO	mg/l O_2	10.4	11.7	12.1	11.4	11.0	11.1	11.1	11.1	11.1	11.2	11.2	11.7	11.8	11.2	11.6
Saturation	%	109	122	126	119	115	116	113	113	113	114	114	120	121	114	119
BOD_5	mg/l O_2	4.8	5.7	6.6	7.6	7.6	8.0	4.3	4.8	6.0	6.2	5.8	6.4	7.2	6.0	6.3
COD	mg/l O_2	24.5	25.8	21.9	24.5	23.6	21.1	20.6	22.4	23.9	22.3	23.2	20.2	23.2	17.1	24.6
NH_3 - N	mg/l	0.26	0.28	0.26	0.29	0.61	1.34	0.18	0.18	0.20	0.30	0.24	0.24	0.20	0.24	0.24
NO_2 - N	"	0.030	0.028	0.028	0.028	0.028	0.028	0.020	0.020	0.020	0.023	0.023	0.023	0.023	0.023	0.025
NO_3 - N	"	0.90	0.85	0.92	0.76	0.76	0.73	0.80	0.90	0.83	0.90	0.87	0.76	0.80	0.70	0.76
Organic N	"	0.98	1.34	1.08	1.96	2.24	1.97	1.34	1.30	1.27	1.28	1.65	1.75	1.15	1.30	1.42
Residue:																
Total	mg/l	401	409	369	385	383	349	359	375	408	382	402	394	381	392	442
Volatile	"	138	139	120	105	120	118	119	120	150	107	139	132	131	139	153
Fixed	"	263	270	249	280	263	231	240	255	258	275	263	262	250	253	289
Orthophosphate	mg/l PO_4	0.295	0.230	0.225	0.167	0.185	0.225	0.282	0.272	0.257	0.345	0.345	0.332	0.295	0.200	0.160
Total Phosphate	"	0.485	0.495	0.430	0.400	0.445	0.577	0.467	0.467	0.495	0.482	0.707	0.495	0.522	0.512	0.775

Enclosure 81

Physical and Chemical Analysis of Vistula Tributaries Water

May 12 - 14, 1975

Sampling stations	Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jezioroka
Analysis	I	II	III	IV	V	VI	VII
Date	5.12	5.12	5.13	5.13	5.13	5.13	5.14
Hour	20^{50}	0^{40}	10^{40}	11^{25}	12^{50}	20^{10}	6^{50}
Temp.of air °C	14	11	13	14	15	16	16
Temp. of water °C	21.4	18.0	15.4	24.0	16.3	18.2	15.8
Turbicidity mg/l SiO_2	12	10	7	12	17	16	30
Colour mg/l Pt	35	50	35	30	35	35	45
Conductance /uS	640	435	510	545	400	390	520
Odor /cold/	1P	1P	2G	1P	2G	1P	3G
pH	7.3	7.3	7.3	7.5	7.4	8.0	7.5
DO mg/l O_2	6,0	7.3	7.1	9.6	6.8	11.4	5.2
Saturation %	66	76	69	112	68	119	52
BOD_5 mg/l O_2	5.3	2.8	4.7	4.8	7.7	5.4	6.5
COD "	22.3	30.1	18.1	18.9	25.6	17.6	33.9
NH_3 - N mg/l N	11.2	0.48	0.50	0.22	2.12	0.26	0.61
NO_2 - N "	0.330	0.023	0.250	0.040	0.082	0.009	0.082
NO_3 - N "	4.06	0.16	4.58	0.76	0.36	0.14	0.56
Organic N "	9.5	0.98	1.31	1.53	1.83	1.12	1.62
Residue:							
Total mg/l	483	334	405	407	285	362	391
Volatile "	190	140	157	130	101	129	139
Fixed "	293	194	248	277	184	233	252
Orthophosphate mg/l PO_4	0.330	0.347	0.330	0.232	0.577	0.180	0.685
Total Phosphate "	0.595	0.570	0.920	0.475	1.08	1.19	1.10

Enclosure 82

Physical and Chemical Analysis of Vistula Water

June 2 - 4, 1975

Sampling stations		1	2	3	4	4a			5	6	7			8			9		
Analysis						l	m	r			l	m	r	l	m	r	l	m	r
Date		6.2	6.2	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Hour		10^{30}	12^{10}	10^{45}	11^{40}	14^{30}	14^{35}	14^{40}	19^{30}	20^{30}	6^{30}	6^{40}	6^{50}	9^{15}	9^{25}	9^{35}	10^{30}	10^{40}	11^{00}
Temp. of air	°C	13	14	11	11	13	13	13	11	11	14	14	14	15	15	15	18	18	18
Temp. of water	°C	15.0	15.2	14.1	16.8	16.2	15.2	14.2	15.8	14.2	15.0	14.8	14.6	14.8	14.6	14.6	14.6	14.8	14.8
Turbicidity	mg/l SiO_2	10	10	17	17	23	23	26	23	12	23	23	23	23	26	23	23	23	23
Colour	mg/l Pt	30	30	30	30	30	30	30	30	35	30	30	30	30	30	30	30	30	30
Conductance	/uS	560	590	580	590	580	580	580	590	570	540	550	550	550	550	560	560	550	560
Odor /cold/		1P	1P	1P	1P	1P	2P	2P	2P	2P	1P	1P	1P	1P	1P	1P	1P	1P	1P
pH		7.2	7.4	7.3	7.4	7.2	7.3	7.2	7.5	7.4	7.3	7.3	7.4	7.5	7.5	7.5	7.2	7.2	7.3
DO	mg/l O_2	9.5	9.1	9.4	8.8	9.1	9.6	9.8	10.9	10.4	10.8	10.5	11.6	10.6	10.9	11.4	11.2	11.0	11.3
Saturation	%	93	89	90	90	91	94	94	109	100	106	103	114	104	107	112	110	108	111
BOD_5	mg/l O_2	3.3	4.4	3.6	3.2	3.9	3.9	3.6	4.8	4.9	3.4	3.6	4.0	4.1	4.6	4.7	4.9	4.8	5.0
COD	mg/l O_2	16.3	15.5	12.2	13.7	17.6	17.2	14.7	17.1	18.1	17.6	19.6	16.7	16.6	16.2	20.1	20.1	19.6	19.6
NH_3 - N	mg/l	0.30	0.78	0.29	0.29	0.50	0.38	0.34	0.32	0.30	0.28	0.30	0.34	0.30	0.28	0.28	0.29	0.30	0.29
NO_2 - N	"	0.044	0.076	0.053	0.049	0.049	0.039	0.042	0.035	0.026	0.044	0.033	0.033	0.030	0.030	0.033	0.033	0.033	0.033
NO_3 - N	"	0.76	0.93	0.93	0.83	1.11	1.34	1.24	1.60	1.06	1.24	1.15	1.24	0.76	0.90	1.02	1.06	1.34	1.30
Organic N	"	0.87	0.85	0.73	0.83	0.83	0.71	0.70	0.62	1.01	1.22	1.29	1.25	1.39	1.36	1.92	1.50	1.18	1.04
Residue:																			
Total	mg/l	422	435	434	435	419	444	432	418	372	387	392	386	413	420	406	377	399	381
Volatile	"	128	131	145	142	135	148	148	150	125	112	116	100	108	130	109	124	118	121
Fixed	"	294	304	289	293	284	296	284	268	247	275	276	286	205	290	297	253	281	260
Orthophosphate	mg/l PO_4	0.235	0.300	0.307	0.307	0.320	0.345	0.435	0.287	0.200	0.185	0.210	0.207	0.190	0.227	0.202	0.230	0.167	0.167
Total Phosphate	"	0.352	0.330	0.325	-	0.377	0.357	-	0.307	0.255	0.272	0.295	0.287	0.300	0.295	0.280	0.297	0.295	0.307

Enclosure 83

Physical and Chemical Analysis of Vistula Tributaries Water

June 2 - 4, 1975

Sampling stations	Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
Analysis	I	II	III	IV	V	VI	VII
Date	6.2	6.2	6.3	6.3	6.3	6.3	6.4
Hour	11^{20}	13^{00}	10^{20}	11^{00}	12^{25}	20^{20}	7^{00}
Temp. of air °C	13	14	11	11	12	11	14
Temp. of water °C	20.6	15.0	12.2	22.8	12.0	14.8	13.0
Turbicidity mg/l SiO_2	12	10	10	23	26	12	33
Colour mg/l Pt	30	40	40	25	45	35	25
Conductance /uS	700	440	550	590	430	375	540
Odor /cold/	1P	1P	1P	1P	2P	2P	2G
pH	7.3	7.6	7.8	7.5	7.1	7.7	7.4
DO mg/l O_2	6.2	8.8	8.2	9.6	6.2	8.9	5.3
Saturation %	68	86	76	110	57	87	50
BOD_5 mg/l O_2	11	3.7	3.2	4.8	6.8	2.8	17
COD mg/l O_2	19.1	26.5	13.7	12.7	30.4	17.2	45.6
NH_3 - N mg/l N	13.7	0.34	0.47	0.28	3.64	0.36	1.26
NO_2 - N "	0.710	0.030	0.174	0.056	0.028	0.010	0.130
NO_3 - N "	3.78	0.62	6.00	0.73	0.19	0.22	1.06
Organic N "	8.05	0.92	0.92	0.91	1.27	0.67	1.72
Residue:							
Total mg/l	486	347	425	415	291	268	430
Volatile "	178	142	158	141	107	88	116
Fixed "	308	205	267	274	184	180	314
Orthophosphate mg/l PO_4	0.237	0.427	0.260	0.312	0.530	0.215	0.675
Total Phosphate "	0.730	0.600	-	0.590	1.32	0.302	1.24

Enclosure 84

Physical and Chemical Analysis of Vistula Water

June 16 - 18, 1975

Sampling stations / Analysis		1	2	3			4			4a			5	6	7	8	9
				l	m	r	l	m	r	l	m	r					
Date		6.16	6.16	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.18	6.18	6.18
Hour		10^{15}	12^{30}	11^{50}	11^{55}	12^{00}	12^{30}	12^{40}	12^{50}	15^{10}	15^{20}	15^{30}	19^{40}	20^{40}	5^{35}	8^{00}	9^{00}
Temp. of air	°C	27	29	21	21	21	21	21	21	22	22	22	13	12	14	16	18
Temp. of water	°C	21.2	21.6	20.3	20.3	20.3	23.3	21.1	20.3	23,0	21,4	21.2	21,7	18.5	19,2	19,4	19.8
Turbicidity	mg/l SiO_2	126	114	129	129	114	100	94	85	97	61	61	70	30	52	76	82
Colour	mg/l Pt	30	30	35	35	35	40	40	35	40	40	40	35	35	35	40	35
Conductance	/uS	460	465	445	450	450	450	450	450	450	450	450	450	440	440	450	450
Odor /cold/		1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P
pH		7.3	7.2	6.9	6.9	6.8	7.2	7.0	7.2	7.1	7.3	7.1	7.3	7.8	7.8	7.8	7.7
DO	mg/l O_2	7.8	7.9	8.2	8.0	8.5	8.4	8.0	8.1	8.0	8.1	8.3	7.7	7.5	8.5	9.3	8.9
Saturation	%	86	89	89	87	93	96	88	88	92	90	92	85	78	90	99	97
BOD_5	mg/l O_2	2.7	4.2	2.8	3.0	3.4	3.4	2.7	3.0	3.8	2.8	2.9	2.2	2.4	2.5	3.2	3.2
COD	mg/l O_2	19.6	14.7	15.3	15.8	16.3	15.3	16.3	17.8	18.5	18.5	18.5	16.8	19.3	17.6	20.6	27.4
NH_3 - N	mg/l	0.30	0.84	0.30	0.30	0.28	0.30	0.30	0.27	0.32	0.28	0.26	0.28	0.28	0.27	0.22	0.27
NO_2 - N	"	0.050	0.065	0.030	0.038	0.033	0.042	0.033	0.042	0.033	0.035	0.033	0.033	0.033	0.024	0.024	0.024
NO_3 - N	"	1.02	1.15	1.20	1.40	1.34	1.24	1.30	1.22	1.20	1.30	1.34	1.20	1.20	1.24	1.13	1.30
Organic N	"	0.56	0.73	0.89	0.70	0.90	1.04	0.63	0.77	0.99	0.89	1.20	0.96	0.96	0.80	0.92	0.86
Residue:																	
Total	mg/l	388	282	353	328	291	370	343	368	339	419	420	430	371	419	438	450
Volatile	"	134	133	127	141	103	134	120	142	130	136	165	136	125	174	150	148
Fixed	"	254	149	226	187	188	236	223	226	209	283	255	294	246	245	288	302
Orthophosphate	mg/l PO_4	0.125	0.165	0.247	0.235	0.255	0.227	0.210	0.190	0.155	0.175	0.180	0.140	0.107	0.120	0.090	0.102
Total Phosphate	"	0.377	0.260	0.290	0.335	0.320	0.282	0.282	0.330	0.350	0.710	0.332	0.590	0.265	0.672	0.670	0.467

Enclosure 85

Physical and Chemical Analysis of Vistula Tributaries Water

June 16 - 18, 1975

Sampling stations	Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
Analysis	I	II	III	IV	V	VI	VII
Date	6.16	6.16	6.17	6.17	6.17	6.17	6.18
Hour	11^{25}	13^{15}	11^{30}	12^{10}	13^{20}	20^{00}	5^{45}
Temp. of air °C	29	29	21	21	21	13	14
Temp. of water °C	24.8	21.0	20.0	30.4	18.4	21.0	17.0
Turbicidity mg/l SiO_2	123	38	14	134	40	36	40
Colour mg/l Pt	40	45	40	35	45	35	90
Conductance /uS	650	485	630	450	430	385	510
Odor /cold/	1P	1P	1G	1P	1P	1P	3G
pH	6.7	7.5	7.1	7.2	7.5	7.8	6.8
DO mg/l O_2	5.5	8.0	6.1	7.7	3.7	8.3	2.1
Saturation %	65	88	66	100	39	92	21
BOD_5 mg/l O_2	10	3,0	2.2	2.1	23	4.5	19
COD mg/l O_2	20.1	26.0	15.8	16.8	39.6	22.8	43.1
NH_3 - N mg/l	13.8	0.36	0.90	0.28	3.93	0.32	1.38
NO_2 - N "	0.105	0.045	0.410	0.045	0.012	0.007	0.142
NO_3 - N "	5.90	0.69	4.18	1.34	0.14	0.11	0.60
Organic N "	7.21	1.41	0.90	0.80	1.81	1.00	1.42
Residue:							
Total mg/l	485	337	473	346	306	337	471
Volatile "	188	156	175	151	113	130	161
Fixed "	297	181	298	195	193	207	310
Orthophosphate mg/l PO_4	0.150	0.312	0.097	0.172	0.385	0.175	0.392
Total Phosphate "	0.415	0.530	0.280	0.580	1.445	1.375	0.900

Enclosure 86

Physical and Chemical Analysis of Vistula Water

July 7 - 9, 1975

Sampling stations / Analysis		1	2	3			4			4a			5	6	7	8	9
				l	m	r	l	m	r	l	m	r					
Date		7.7	7.7	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.9
Hour		10^{30}	12^{10}	12^{25}	12^{30}	12^{35}	13^{00}	13^{05}	13^{10}	15^{45}	15^{50}	15^{55}	20^{10}	20^{55}	5^{55}	8^{05}	9^{05}
Temp. of air	°C	27	30	27	27	27	27	27	27	28	28	28	22	21	22	24	26
Temp. of water	°C	20.8	21.1	21.6	21.6	21.6	24.4	21.8	21.6	24.3	23.0	22.1	23.0	22.8	22.6	22.6	23.0
Turbicidity	mg/l SiO_2	108	85	97	94	85	97	94	100	94	100	94	88	78	78	85	94
Colour	mg/l Pt	40	40	35	35	40	40	40	45	45	50	50	45	45	40	50	50
Conductance	/uS	500	530	550	560	560	550	560	560	550	550	550	540	500	520	530	530
Odor /cold/		2P	2P	2P	2P	2P	2P	1P	2P	1P	1P	1P	1P	1P	1P	1P	1P
pH		7.9	7.9	7.8	8.0	8.0	7.9	7.9	8.0	8.0	7.9	7.9	7.9	8.0	7.1	8.1	8.1
DO	mg/l O_2	6.3	6.0	7.6	7.6	8.0	7.3	7.4	7.4	7.7	7.4	7.0	6.9	7.3	7.6	8.2	8.0
Saturation	%	70	66	86	86	90	85	83	83	90	85	79	79	84	87	94	92
BOD_5	mg/l O_2	3.7	3.9	2.9	3.2	3.1	2.6	2.9	2.6	3.4	2.8	2.3	2.6	3.3	2.7	3.5	2.8
COD	mg/l O_2	24.3	18.8	21.8	24.3	23.8	25.7	26.3	25.2	24.7	24.3	22.8	26.2	23.8	25.2	27.2	22.3
NH_3 - N	mg/l	0.38	1.36	0.38	0.37	0.34	0.32	0.34	0.30	0.29	0.38	0.30	0.32	0.38	0.44	0.36	0.36
NO_2 - N	"	0.070	0.153	0.062	0.077	0.087	0.057	0.083	0.076	0.067	0.059	0.080	0.059	0.052	0.033	0.035	0.038
NO_3 - N	"	1.27	1.40	1.32	1.42	1.34	1.54	1.52	1.57	1.40	1.54	1.30	1.34	1.28	1.15	1.34	1.34
Organic N	"	0.96	1.25	0.86	1.00	0.95	0.99	0.80	0.90	0.83	1.26	1.26	1.17	1.11	1.54	1.15	1.18
Residue:																	
Total	mg/l	415	406	410	391	409	453	406	399	392	413	403	410	377	405	388	390
Volatile	"	110	113	104	114	131	133	119	129	123	133	115	126	119	131	128	123
Fixed	"	305	293	306	277	278	320	287	270	269	280	288	284	258	274	260	267
Orthophosphate	mg/l PO_4	0.122	0.140	0.210	0.220	0.235	0.215	0.240	0.240	0.210	0.202	0.227	0.242	0.190	0.175	0.167	0.155
Total Phosphate	"	0.530	0.435	0.427	0.465	0.485	0.620	0.412	0.365	0.522	0.440	0.402	0.502	0.352	0.482	0.482	0.400

Enclosure 87

Physical and Chemical Analysis of Vistula Tributaries Water

July 7 - 9, 1975

Sampling stations		Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
Analysis		I	II	III	IV	V	VI	VII
Date		7.7	7.7	7.8	7.8	7.8	7.8	7.9
Hour		11^{30}	13^{00}	12^{00}	12^{50}	14^{00}	20^{30}	6^{05}
Temp. of air	°C	29	30	27	27	28	22	22
Temp. of water	°C	24.1	22.4	21.8	29.4	21.8	22.2	20.2
Turbicidity	mg/l SiO_2	46	17	10	91	36	46	76
Colour	mg/l Pt	45	45	50	50	35	30	100
Conductance	/uS	690	520	570	550	450	430	650
Odor /cold/		2P	2P	1P	1P	2G	1P	3G
pH		7.7	8.1	7.8	8.0	7.2	7.2	7.2
DO	mg/l O_2	4.5	7.5	6.9	7.5	5.4	8.6	0.4
Saturation	%	53	86	78	[illegible]	61	97	4
BOD_5	mg/l O_2	10.4	2.5	2.7	2.4	12.0	5.2	100
COD	mg/l O_2	22.8	24.3	24.3	24.3	36.6	28.2	61.4
NH_3 - N	mg/l	15.7	0.40	0.48	0.36	1.88	0.32	1.25
NO_2 - N	"	0.725	0.022	0.075	0.062	0.070	0.002	0.017
NO_3 - N	"	4.46	0.62	2.44	1.34	0.22	0.10	0.14
Organic N	"	8.75	0.72	1.86	1.10	1.34	1.22	2.01
Residue:								
Total	mg/l	425	363	380	401	287	298	417
Volatile	"	153	145	133	124	105	93	129
Fixed	"	272	218	247	277	182	205	288
Orthophosphate	mg/l PO_4	0.177	0.392	0.135	0.192	0.297	0.130	0.352
Total Phosphate	"	0.330	0.510	0.302	0.422	1.12	0.440	0.595

Physical and Chemical Analysis of Vistula Water

August 18 - 20, 1975

Sampling stations		1			2	3			4			4a			5	6	7	8	9
Analysis		l	m	r		l	m	r	l	m	r	l	m	r					
Date		8.18	8.18	8.18	8.18	8.19	8.19	8.19	8.19	8.19	8.19	8,19	8.19	8.19	8.19	8.19	8.20	8.20	8.20
Hour		11^{30}	11^{40}	11^{55}	13^{20}	8^{15}	8^{20}	8^{25}	9^{10}	9^{20}	9^{30}	12^{35}	12^{45}	12^{55}	18^{10}	19^{25}	6^{55}	10^{15}	11^{20}
Temp. of air	°C	26	26	26	27	20	20	20	20	20	20	23	23	23	17	16	19	23	24
Temp. of water	°C	21.4	21.4	21.4	21.4	20.4	20.4	20.4	22.6	21.6	20.4	22.2	22.8	21.2	21.6	21.2	20.8	21.2	21.2
Turbicidity	mg/l SiO_2	20	20	20	23	26	26	30	33	30	30	30	26	26	23	20	20	23	20
Colour	mg/l Pt	35	40	35	35	30	30	30	30	30	30	30	30	30	30	30	30	40	40
Conductance	/uS	650	650	625	640	625	625	625	620	640	620	600	600	600	610	560	600	590	590
Odor /cold/		1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P
pH		7.5	7.4	7.4	7.6	7.5	7.4	7.4	7.6	7.5	7.5	7.7	7.6	7.7	7.6	7.6	7.6	7.6	7.6
DO	mg/l O_2	9.0	11.7	11,9	10.8	12.2	12.2	12.2	10.8	11.3	12.2	12.7	12.2	13.6	13.3	12.0	12.0	12.5	12.2
Saturation	%	100	129	132	120	133	133	133	124	127	133	143	137	151	150	133	133	139	135
BOD_5	mg/l O_2	4.6	7.1	6.9	8.3	7.6	7.9	7.9	6.8	7.1	7.8	6.9	6.5	7.3	9.1	7.9	7.8	9.3	8.6
COD	mg/l O_2	30.4	33	30.4	27.6	30.9	25.9	25.0	26.6	25.9	29.5	28.6	31.8	28.2	30.0	30.4	33.2	30.9	33.2
NH_3- N	mg/l	0.39	0.46	0.42	0.96	0.36	0.30	0.34	0.34	0.32	0.38	0.52	0.39	0.34	0.34	0.34	0.32	0.34	0.40
NO_2- N	"	0.021	0.019	0.021	0.058	0.025	0.030	0.030	0.027	0.029	0.030	0.030	0.030	0.029	0.019	0.013	0.013	0.013	0.015
NO_3- N	"	0.95	0,97	1.00	1.15	0.95	0.97	0.87	1.02	0.88	0.95	0.81	0.83	0.88	0.92	0.76	0.83	0.80	0.80
Organic N	"	1.24	1.25	1.56	1.70	1.46	1.61	1.42	1.42	1.48	1.35	1.59	1.74	1.69	1.46	1.75	1.94	1.72	1.96
Residue:																			
Total	mg/l	472	493	472	465	466	455	449	467	492	455	443	473	446	460	388	427	440	419
Volatile	"	158	188	147	160	186	151	167	193	159	157	152	183	156	162	140	147	175	146
Fixed	"	314	305	325	305	280	304	282	274	333	298	291	290	290	298	248	280	265	273
Orthophosphate	mg/l PO_4	0.115	0	0.145	0.377	0.200	0.200	0.200	0.195	0.187	0.197	0.170	0.157	0.135	0.120	0.125	0.080	0.090	0.100
Total Phosphate	"	0.352	3	0.338	0.503	0.398	0.363	0.365	0.370	0.398	0.408	0.440	0.400	0.380	0.365	0.335	0.408	0.375	0.400

Enclosure 89

Physical and Chemical Analysis of Vistula Tributaries Water

August 18 - 20, 1975

Sampling stations	Kurówka	Wieprz	Zagoździonka	Heated Water	Radomka	Pilica	Jeziorka
Analisis	I	II	III	IV	V	VI	VII
Date	8.18	8.18	8.19	8.19	8.19	8.19	8.20
Hour	12^{45}	14^{00}	7^{50}	8^{40}	10^{20}	18^{40}	7^{10}
Temp. of air °C	27	27	19	20	21	17	19
Temp. of water °C	23.0	20.3	19.2	29.0	19.1	20.4	19.4
Turbidity mg/l SiO_2	33	17	5	23	20	14	61
Colour mg/l Pt	40	45	40	40	45	30	90
Conductance /uS	740	470	575	640	430	380	600
Odor /cold/	1P	1P	1P	1P	1P	1P	2G
pH	6.9	7.1	7.2	7.4	7.1	7.1	6.8
DO mg/l O_2	5.7	8.7	4.6	10.3	5.1	8.0	3.4
Saturation %	66	95	49	131	54	87	36
BOD_5 mg/l O_2	1.7	5.4	2.0	6.4	6.0	4.9	56
COD mg/l O_2	26.1	35.2	19.0	25.5	29.1	29.4	84.7
NH_3 - N mg/l	18.6	0.59	0.50	0.34	2.88	0.39	1.20
NO_2 - N "	0.625	0.081	0.095	0.029	0.048	0.003	0.083
NO_3 - N "	4.96	0.59	4.18	1.02	0.15	0.20	0.39
Organic N "	12.0	1.42	1.25	1.80	1.72	1.40	2.58
Residue:							
Total mg/l	532	349	427	486	286	296	469
Volatile "	214	131	133	191	115	94	160
Fixed "	318	218	294	295	171	202	309
Orthophosphate mg/l PO_4	0.255	0.337	0.140	0.165	0.487	0.202	0.600
Total Phosphate "	0.465	0.600	0.198	0.355	1.12	0.475	0.900

Enclosure 90

Physical and Chemical Analysis of Vistula Water

September 15 - 17, 1975

Sampling stations / Analysis		1	2	3			4			4a			5	6	7	8	9
				l	m	r	l	m	r	l	m	r					
Date		9.15	9.15	9.16	9.16	9.16	9.16	9.16	9.16	9.16	9.16	9.16	9.16	9.16	9.17	9.17	9.17
Hour		8^{40}	12^{20}	9^{50}	10^{00}	10^{10}	10^{50}	10^{45}	10^{35}	14^{30}	14^{40}	14^{50}	21^{00}	21^{45}	10^{15}	14^{00}	15^{30}
Temp. of air	°C	15	21	20	20	20	21	21	21	23	23	23	15	15	19	21	21
Temp. of water	°C	16.0	16.2	16.4	16.4	16.4	18.8	18.2	17.0	18.7	18.2	17.2	18.0	17.6	17.6	18.6	18.9
Turbicidity	mg/l SiO_2	20	17	17	20	17	23	20	20	20	23	20	17	20	20	23	20
Colour	mg/l Pt	30	30	30	30	30	30	30	30	30	30	30	30	35	30	30	30
Conductance	/uS	620	610	600	700	590	700	700	690	670	670	670	660	580	630	620	600
Odor /cold/		2P	2P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P
pH		7.4	7.3	7.7	7.7	7.7	7.7	7.7	7.7	7.8	7.8	7.9	8.0	7.8	8.1	8.2	8.3
DO	mg/l O_2	9.6	9.5	8.3	8.9	9.1	8.6	8.2	9.5	10.8	10.7	11.5	11.5	9.7	12.6	14.4	14.2
Saturation	%	96	95	83	89	91	91	85	97	115	112	118	120	101	132	154	151
BOD_5	mg/l O_2	3.4	4.0	2.1	2.9	3.0	2.7	2.5	3.7	5.1	4.9	5.5	5.7	4.0	6.9	7.2	7.7
COD	mg/l O_2	16.4	16.0	19.1	19.1	15.8	19.3	16.4	15.4	20.0	18.2	17.3	25.0	21.5	25.0	24.6	23.7
NH_3 - N	mg/l	0.36	1.01	0.28	0.34	0.30	0.38	0.35	0.38	0.40	0.30	0.29	0.28	0.28	0.20	0.24	0.26
NO_2 - N	"	0.040	0.060	0.045	0.047	0.052	0.052	0.052	0.047	0.047	0.050	0.052	0.043	0.033	0.028	0.028	0.028
NO_3 - N	"	0.87	1.06	1.06	0.93	0.87	0.9	0.83	0.87	0.85	1.02	0.95	0.90	0.81	1.08	1.06	0.90
Organic N	"	1.02	1.73	1.19	1.54	1.34	1.15	1.30	1.49	1.14	1.28	1.11	1.02	1.02	1.22	1.84	1.70
Residue:																	
Total	mg/l	491	488	484	507	466	474	459	484	463	487	484	467	425	444	495	417
Volatile	"	178	171	159	166	149	169	163	171	175	157	171	142	137	152	198	147
Fixed	"	313	317	325	341	317	305	296	313	288	330	313	325	288	292	297	270
Orthophosphate	mg/l PO_4	0.080	0.305	0.260	0.253	0.277	0.263	0.265	0.265	0.277	0.270	0.260	0.130	0.167	0.102	0.095	0.090
Total Phosphate	"	0.337	0.570	0.485	0.467	0.430	0.392	0.415	0.432	0.440	0.400	0.407	0.365	0.375	0.392	0.385	0.372

Enclosure 91

Physical and Chemical Analysis of Vistula Tributaries Water

September 15 - 17, 1975

Sampling stations / Analysis		Kurówka I	Wieprz II	Zagożdżonka III	Heated Water IV	Radomka V	Pilica VI	Jeziorka VII
Date		9.15	9.15	9.16	9.16	9.16	9.16	9.17
Hour		10^{50}	17^{20}	9^{15}	10^{25}	12^{05}	21^{20}	10^{30}
Temp. of air	°C	20	19	18	20	22	15	19
Temp. of water	°C	21.2	17.2	14.8	24.2	18.2	16.5	15.0
Turbicidity	mg/l SiO_2	23	17	7	10	17	14	46
Colour	mg/l Pt	35	40	40	30	50	40	90
Conductance	/uS	720	410	670	590	420	400	600
Odor /cold/		1P	1P	1P	1P	2S	1P	3S/G
pH		7.3	7.7	7.1	7.7	7.2	7.6	6.4
DO	mg/l O_2	6.6	10.5	5.2	8.6	4.3	8,5	1.7
Saturation	%	73	107	51	100	42	87	16
BOD_5	mg/l O_2	38	3.8	1.0	3.6	10	3.1	24
COD	mg/l O_2	20.0	18.2	14.6	17.3	36.0	23.3	44.6
NH_3 - N	mg/l	14.6	0.29	0.45	0.41	3.03	0.34	1.22
NO_2 - N	"	0.750	0.033	0.042	0.055	0.025	0.007	0.045
NO_3 - N	"	4.18	0.83	5.36	1.13	0.19	0.25	0.30
Organic N	"	21.5	1.22	0.78	1.26	3.52	0.86	1.68
Residue:								
Total	mg/l	574	344	514	442	296	362	421
Volatile	"	246	151	182	156	117	160	130
Fixed	"	328	193	332	286	179	202	291
Orthophosphate	mg/l PO_4	0.120	0.265	0.132	0.192	0.385	0.215	0.360
Total Phosphate	"	0.482	0.787	0.630	0.385	0.590	0.800	0.520

Enclosure 92

Physical and Chemical Analysis of Vistula Water

October 6 - 8, 1975

Sampling stations		1			2			3			4			4a			5		
Analysis		l	m	r	l	m	r	l	m	r	l	m	r	l	m	r	l	m	r
Date		10.6	10.6	10.6	10.6	10.6	10.6	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.8	10.8	10.8
Hour		5^{05}	5^{10}	5^{15}	11^{00}	11^{10}	11^{20}	11^{45}	11^{55}	12^{00}	13^{00}	13^{10}	13^{15}	17^{00}	17^{10}	17^{20}	1^{15}	1^{20}	1^{40}
Temp. of air	°C	11	11	11	14	14	14	12	12	12	12	12	12	11	11	11	5	5	5
Temp. of water	°C	13.1	12.8	13.0	13.4	13.6	13.6	12.8	12.8	12.8	14.0	13.6	13.0	13.4	13.2	13.2	13.0	12.4	12.0
Turbicidity	mg/l SiO_2	14	14	14	14	14	12	14	12	10	7	12	10	5	5	10	5	5	5
Colour	mg/l Pt	30	30	30	45	40	40	45	45	40	40	40	40	45	45	45	40	40	40
Conductance	/uS	800	810	800	780	800	790	740	770	730	720	720	750	720	725	730	725	720	725
Odor /cold/		1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P
pH		7.3	7.4	7.4	7.4	7.5	7.4	8.2	8.2	8.1	8.2	8.2	8.2	8.1	8.2	8.2	8.2	8.3	8.3
DO	mg/l O_2	8.6	8.4	8.5	8.9	8.8	8.7	9.9	9.9	10.0	10.1	9.9	9.9	9.9	9.9	9.2	8.5	9.1	9.1
Saturation	%	81	79	80	83	84	83	93	93	94	97	95	93	93	93	86	80	84	84
BOD_5	mg/l O_2	5.6	5.8	4.8	4.1	5.1	4.3	4.9	4.3	4.2	5.0	4.2	3.9	5.4	4.8	3.5	4.3	5.0	4.3
COD	mg/l O_2	22.0	22.9	21.1	22.0	22.9	23.4	19.0	20.2	21.5	23.8	29.5	22.0	27.7	24.6	22.0	23.4	22.9	22.9
NH_3 - N	mg/l	0.73	0.73	0.73	0.66	1.05	1.02	0.78	0.79	0.70	0.76	0.78	0.80	0.82	0.80	0.72	0.72	0.76	0.73
NO_2 - N	"	0.050	0.050	0.052	0.055	0.073	0.067	0.090	0.085	0.085	0.090	0.090	0.083	0.084	0.084	0.075	0.075	0.073	0.075
NO_3 - N	"	0.69	0.64	0.74	0.69	0.78	0.78	1.11	1.08	0.88	1.02	0.88	0.85	1.04	0.97	0.87	0.87	0.78	0.90
Organic N	"	1.80	2.09	2.20	1.25	1.50	1.36	2.09	1.70	1.62	2.61	1.90	1.83	1.80	2.31	2.42	1.14	1.76	1.26
Residue:																			
Total	mg/l	663	603	616	620	640	659	590	591	563	573	635	605	569	560	552	563	555	571
Volatile	"	217	180	169	191	203	210	173	170	174	172	204	177	173	163	160	171	189	162
Fixed	"	446	423	447	429	437	449	417	421	389	401	431	428	396	397	392	388	366	409
Orthophosphate	mg/l PO_4	0.110	0.125	0.095	0.165	0.187	0.192	0.220	0.227	0.250	0.227	0.235	0.252	0.220	0.202	0.205	0.165	0.157	0.175
Total Phosphate	"	0.345	0.330	0.325	0.407	0.377	0.520	0.312	0.317	0.357	0.372	0.392	0.385	0.380	0.415	0.385	0.330	0.260	0.280

Sampling stations		6			7			8			9		
Analysis		l	m	r	l	m	r	l	m	r	l	m	r
Date		10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
Hour		8^{15}	8^{25}	8^{35}	14^{40}	14^{45}	14^{50}	18^{05}	18^{15}	18^{20}	20^{35}	20^{45}	20^{50}
Temp. of air	°C	8	8	8	9	9	9	8	8	8	7	7	7
Temp. of water	°C	11.5	11.5	11.8	11.8	11.8	11.8	11.7	11.6	11.6	11.3	11.2	11.2
Turbicidity	mg/l SiO_2	7	10	7	7	10	12	10	10	10	7	7	7
Colour	mg/l Pt	40	45	45	45	45	45	45	45	45	45	45	45
Conductance	/uS	670	670	670	640	640	640	620	630	630	620	620	620
Odor /cold/		1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P
pH		8.2	8.3	8.3	8.2	8.2	8.3	8.2	8.1	8.1	8.2	8.2	8.2
DO	mg/l O_2	9.3	9.2	9.4	11.7	11.6	11.2	10.7	11.0	10.7	10.7	10.8	10.4
Saturation	%	85	84	86	108	107	103	98	101	98	98	97	94
BOD_5	mg/l O_2	4.7	6.0	5.0	4.7	4.6	4.6	4.0	4.3	4.2	4.0	4.1	3.9
COD	mg/l O_2	24.6	30.4	26.4	23.4	24.2	23.8	22.0	22.9	25.5	22.0	21.5	21.1
NH_3 - N	mg/l	0.50	0.56	0.66	0.29	0.35	0.37	0.34	0.32	0.32	0.36	0.21	0.30
NO_2 - N	"	0.060	0.065	0.065	0.057	0.057	0.057	0.055	0.052	0.055	0.052	0.052	0.052
NO_3 - N	"	1.02	1.06	1.06	0.90	1.00	1.13	1.06	1.02	0.95	1.02	0.97	1.11
Organic N	"	2.21	2.36	1.70	1.77	1.39	1.54	1.60	1.95	1.50	1.36	1.80	1.30
Residue:													
Total	mg/l	523	562	552	543	537	557	528	540	530	535	528	511
Volatile	"	159	166	161	168	177	169	165	172	168	159	162	169
Fixed	"	364	396	391	375	360	388	363	368	362	376	366	342
Orthophosphate	mg/l PO_4	0.175	0.157	0.137	0.142	0.142	0.130	0.175	0.145	0.130	0.160	0.130	0.125
Total Phosphate	"	0.274	0.262	0.300	0.352	0.320	0.337	0.325	0.320	0.365	0.305	0.292	0.295

Enclosure 93

Physical and Chemical Analysis of Vistula Tributaries Water

October 6 - 8, 1975

Sampling stations	Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
Analysis	I	II	III	IV	V	VI	VII
Date	10.6	10.6	10.7	10.7	10.7	10.8	10.8
Hour	9^{30}	17^{35}	11^{25}	12^{10}	14^{30}	2^{00}	15^{10}
Temp. of air °C	13	12	12	12	12	5	9
Temp. of water °C	19.1	13.3	11.8	21.6	12.6	11.0	11.6
Turbicidity mg/l SiO_2	17	14	12	14	23	7	26
Colour mg/l Pt	40	45	70	45	40	40	50
Conductance /uS	930	420	525	725	380	410	450
Odor /cold/	1P	1P	1P	1P	1P	1P	2S
pH	7.1	7.3	7.3	8.2	8.0	8.1	6.8
DO mg/l O_2	6.3	7.7	5.9	8.8	5.3	9.2	6.2
Saturation %	67	72	54	99	50	83	57
BOD_5 mg/l O_2	50	5.1	1.5	3.7	19	4.1	22
COD mg/l O_2	25.5	22.9	17.6	23.4	33.4	21.5	51.5
NH_3 - N mg/l	18.3	0.50	0.68	0.86	3.04	0.44	1.19
NO_2 - N "	0.082	0.055	0.120	0.090	0.005	0.026	0.080
NO_3 - N "	3.08	0.66	4.06	0.95	0.16	0.30	0.50
Organic N "	15.7	2.13	0.98	1.11	2.21	1.65	1.52
Residue:							
Total mg/l	704	339	453	554	266	303	392
Volatile "	267	132	154	155	112	84	131
Fixed "	437	207	299	399	154	219	261
Orthophosphate mg/l PO_4	0.215	0.415	0.262	0.252	0.417	0.097	0.430
Total Phosphate "	1.10	0.560	0.337	0.325	0.934	0.245	0.714

Physical and Chemical Analysis of Vistula Water

October 20 - 22, 1975

Sampling stations / Analysis		1	2			3			4			4a	5	6	7	8	9
			l	m	r	l	m	r	l	m	r						
Date		10.20	10.20	10.20	10.20	10.21	10.21	10.21	10.21	10.21	10.21	10.21	10.21	10.21	10.22	10.22	10.22
Hour		13^{00}	16^{05}	16^{15}	16^{20}	8^{20}	8^{25}	8^{30}	9^{10}	9^{15}	9^{20}	12^{40}	18^{00}	18^{55}	6^{00}	8^{45}	10^{00}
Temp. of air	°C	9	10	10	10	10	10	10	10	10	10	11	9	8	7	8	8
Temp. of water	°C	9.2	9.6	9,8	9.8	9.6	9.6	9.6	13.8	12.0	9.8	12.2	11.0	10.2	10.0	10.0	10.2
Turbicidity	mg/l SiO_2	17	23	23	23	17	17	17	12	12	14	14	17	20	17	17	12
Colour	mg/l Pt-	25	30	30	30	35	35	35	35	35	35	35	35	35	40	40	35
Conductance	/uS	760	760	760	750	760	750	750	760	750	740	700	750	620	700	690	700
Odor /cold/		1P	1P	1P	1P	1P	1P	1P	1F	1P	1P	1P	1P	1P	1P	1P	1P
pH	mg/l O_2	9.7	9.1	8.8	8.9	9.5	9.3	9.4	9.1	9.4	9.5	8.9	9.2	10.0	9.3	9.5	9.7
Saturation	%	83	80	77	78	83	82	82	87	86	83	82	83	87	82	83	85
BOD_5	mg/l O_2	3.2	4.1	4.7	4.9	4.7	4.8	5.0	4.4	4.6	5.3	5.7	4.0	3.2	6.1	4.9	4.7
COD	mg/l O_2	27.7	16.0	22.6	16.8	21.0	20.6	25.2	19.3	26.8	24.4	26.5	24.3	17.6	22.6	26.0	20.1
NH_3 - N	mg/l	1.42	1.40	1.71	1.89	1.34	1.40	1.42	1.38	1.42	1.45	1.41	1.42	1.22	0.97	0.98	0.95
NO_2 - N	"	0.030	0.030	0.036	0.040	0.046	0.044	0.046	0.050	0.048	0.046	0.052	0.055	0.059	0.050	0.048	0.050
NO_3 - N	"	0.62	0.62	0.56	0.56	0.56	0.62	0.64	0.64	0.68	0.66	0.64	0.69	0.66	0.87	0.90	0.87
Organic N	"	0.82	0.91	1.02	1.36	0.68	0.75	0.88	0.57	1.05	0.84	0.79	1,11	0.92	0.83	0.92	0.73
Residue:																	
Total	mg/l	607	625	616	627	569	558	562	555	566	548	533	546	559	523	531	536
Volatile	"	166	186	194	191	152	163	177	151	184	182	162	141	126	140	159	162
Fixed	"	441	439	422	436	417	395	385	404	382	366	371	405	333	383	372	374
Orthophosphate	mg/l PO_4	0.117	0.110	0.105	0.135	0.140	0.135	0.157	0.130	0.140	0.150	0.135	0.157	0.120	0.115	0.117	0.120
Total Phosphate	"	0.315	0.312	0.375	0.352	0.267	0.255	0.370	0.330	0.372	0.352	0.365	0.315	0.265	0.395	0.450	0.392

Enclosure 95

Physical and Chemical Analysis of Vistula Tributaries Water

October 20 - 22, 1975

Sampling stations / Analysis		Kurówka I	Wieprz II	Zagożdżonka III	Heated Water IV	Radomka V	Pilica VI	Jeziorka VII
Date		10.20	10.20	10.21	10.21	10.21	10.21	10.22
Hour		15^{00}	19^{30}	8^{00}	8^{40}	10^{20}	18^{20}	6^{10}
Temp. of air	°C	10	11	10	10	11	9	7
Temp. of water	°C	14.2	9.0	9.2	20.5	10.0	9.2	9.8
Turbicidity	mg/l SiO_2	33	23	10	17	30	12	23
Colour	mg/l Pt	30	35	40	30	45	45	60
Conductance	/uS	760	430	580	760	430	360	460
Odor /cold/		1P	1P	1P	1P	2S	1P	2S
DO	mg/l O_2	7.5	8.7	7.3	8.7	6.1	10.1	7.7
Saturation	%	72	75	62	95	53	86	68
BOD_5	mg/l O_2	8.0	4.1	2.4	4.8	22	4.9	9.5
COD	mg/l O_2	24.0	24.0	18.5	18.9	50.4	18.9	37.8
NH_3 - N	mg/l	18.4	0.46	0.51	1.48	3.21	0.54	1.05
NO_2 - N	"	0.680	0.027	0.100	0.065	0.032	0.009	0.046
NO_3 - N	"	4.18	0.32	5.10	0.68	0.13	0.25	0.41
Organic N	"	19.6	1.04	0.51	0.74	2.44	0.56	1.37
Residue:								
Total	mg/l	624	335	467	568	318	275	357
Volatile	"	271	144	168	153	125	89	131
Fixed	"	353	191	299	415	193	186	226
Orthophosphate	mg/l PO_4	0.112	0.250	0.180	0.140	0.200	0.100	0.357
Total Phosphate	"	0.390	0.540	0.265	0.365	0.850	0.250	0.754

Enclosure 96

Physical and Chemical Analysis of Vistula Water

November 10 - 12, 1975

Sampling stations / Analysis		1	2	3			4			4a			5			6	7	8	9
				l	m	r	l	m	r	l	m	r	l	m	r				
Date		11.10	11.10	11.11	11.11	11.11	11.11	11.11	11.11	11.11	11.11	11,11	11.11	11.11	11.11	11.11	11.12	11.12	11.12
Hour		11^{55}	12^{30}	9^{30}	10^{00}	10^{10}	10^{25}	10^{30}	10^{40}	14^{40}	14^{45}	14^{55}	21^{00}	21^{05}	21^{10}	21^{35}	10^{15}	13^{50}	15^{20}
Temp. of air	°C	3	4	3	3	3	4	4	4	5	5	5	3	3	3	2	1	2	2
Temp. of water	°C	6.2	6.4	5.0	5.0	5.0	9.4	7.2	5.2	7,2	6.8	5.0	6.3	6.0	5.0	4.6	4.6	4.6	4.8
Turbicidity	mg/l SiO_2	17	23	17	14	14	26	14	20	20	23	23	23	17	17	23	12	12	12
Colour	mg/l Pt	40	35	35	35	40	35	40	40	40	35	40	40	40	40	40	40	40	45
Conductance	/uS	660	660	700	720	720	710	720	710	640	640	640	650	670	690	670	610	620	620
Odor /cold/		1P	1P	1P	1P	4P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P
pH		7.3	7.5	7.8	7.8	7.8	7.7	7.7	7.7	7.7	7.8	7.7	7.8	7.8	7.7	7.6	7.5	7.5	7.5
DO	mg/l O_2	10.2	10.1	11.5	11.4	11.7	10.5	10.9	11.1	10.6	10.3	11.1	10.3	10.4	10.3	10.8	11,5	11.4	11.5
Saturation	%	81	80	89	89	91	90	89	86	86	85	86	82	83	80	84	89	89	89
BOD_5	mg/l O_2	6.0	3.7	3.9	3.3	4.0	4.5	3.7	5.3	6.5	5.1	4.1	4.4	4.5	3.6	4.1	3.6	3.7	3.7
COD	mg/l O_2	32.5	31.0	25.4	24.0	-	-	21.3	18.3	19.7	20.6	16.5	-	16.9	18.4	20.6	18.4	18.8	18.2
NH_3 - N	mg/l	1.08	1.46	1.06	1.12	1.10	1.12	1.14	1.14	1.23	1.23	1.19	1.21	1.16	1.14	1.04	0.79	0.92	0.90
NO_2 - N	"	0.005	0.040	0.030	0.025	0.027	0.040	0.045	0.030	0.040	0.040	0.033	0.042	0.045	0.045	0.040	0.045	0.040	0.035
NO_3 - N	"	0.78	0.80	0.83	0.69	0.66	0.66	0.73	0.80	0.68	0.78	0.66	0.57	0.73	0.57	0.87	0.87	0.83	0.66
Organic N	"	0.51	0.78	0.40	0.58	0.84	0.45	0.56	0.65	0.92	0.67	0.33	0.92	0.62	0.58	0.56	0.66	0.54	0.86
Residue:																			
Total	mg/l	491	530	471	491	482	514	518	497	456	468	458	485	447	488	500	451	470	462
Volatile	"	180	168	158	174	173	158	146	148	155	147	159	165	164	154	141	170	155	136
Fixed	"	311	362	313	317	309	356	372	349	301	321	299	320	283	334	359	281	315	326
Orthophosphate	mg/l PO_4	0.360	0.110	0.160	0.120	0.142	0.120	0.110	0.110	0.100	0.117	0.095	0.100	0.115	0.147	0.095	0.085	0.085	0.085
Total Phosphate	"	0.595	0.345	0.325	0.345	0.320	0.352	0.340	0.317	0.467	0.422	0.372	0.357	0.385	0.352	0.312	0.380	0.337	0.320

Physical and Chemical Analysis of Vistula Tributaries Water

November 10 - 12, 1975

Sampling stations	Kurówka	Wieprz	Zagożdżonka	Heated Water	Radomka	Pilica	Jeziorka
Analysis	I	II	III	IV	V	VI	VII
Date	11.10	11.10	11.11	11.11	11.11	11.11	11.12
Hour	12^{30}	13^{30}	9^{15}	10^{15}	12^{10}	21^{25}	10^{35}
Temp. of air °C	3	4	3	5	4	2	1
Temp. of water °C	11.2	5.8	4.8	17.2	4.8	4.8	5.0
Turbicidity mg/l SiO_2	12	17	17	17	43	23	50
Colour mg/l Pt	30	35	35	40	45	45	40
Conductance /µS	760	440	560	710	380	370	500
Odor /cold/	1P	1P	1P	1P	1P	1P	1S
pH	7.0	7.5	7.6	7.7	7.6	7.8	6.3
DO mg/l O_2	9.2	9.9	9.9	9.8	10.7	11.8	8.7
Saturation %	83	79	77	100	83	92	67
BOD_5 mg/l	5.8	3.5	1.9	3.5	8.7	2.9	9.0
COD "	38.0	31.5	25.4	14.6	34.8	17.4	45.2
NH_3 - N mg/l	12.0	0.60	1.03	1.02	1.95	0.35	1.21
NO_2 - N "	0.850	0.030	0.175	0.060	0.025	0.004	0.070
NO_3 - N "	2.40	0.66	5.36	0.74	0.32	0.53	0.32
Organic N "	8.61	0.38	0.48	0.78	1.74	0.47	1.28
Residue:							
Total mg/l	596	328	460	477	260	234	413
Volatile "	222	151	160	171	104	82	153
Fixed "	374	177	300	306	156	152	260
Orthophosphate mg/l PO_4	0.140	0.235	0.150	0.130	0.107	0.065	0.422
Total Phosphate "	0.352	0.640	0.470	0.400	0.990	0.337	1.04

Physical and Chemical Analysis of Vistula Water

December 1 - 3, 1975

Sampling stations / Analysis		1	2	3			4			4a	5	6			7	8	9
				l	m	r	l	m	r			l	m	r			
Date		12.1	12.1	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.3	12.3	12.3
Hour		8^{10}	12^{15}	8^{25}	8^{30}	8^{35}	9^{25}	9^{30}	9^{35}	13^{20}	19^{45}	20^{30}	20^{35}	20^{50}	9^{30}	13^{15}	14^{45}
Temp. of air	°C	6	6	1	1	1	2	2	2	4	3	2	2	2	2	2	2
Temp. of water	°C	1.0	1.4	1.4	1.4	1.4	7.4	4.1	1.4	4.2	3.8	2.4	2.2	2.2	2.2	2.2	2.2
Turbicidity	mg/l SiO_2	23	23	23	17	17	17	30	17	17	30	30	30	30	17	30	23
Colour	mg/l Pt	35	40	40	45	45	50	45	40	45	40	40	40	40	40	45	45
Conductance	/uS	620	620	590	590	590	580	600	590	580	560	540	520	525	550	500	490
Odor /cold/		1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P	1P
pH		7.2	7.3	7.3	7.6	7.6	7.6	7.6	7.6	7.6	7,7	7.6	7.6	7.6	7.7	7.6	7.7
DO	mg/l O_2	12.0	12.3	12.1	12.0	12.4	11.2	11.8	12.1	11.8	12.2	11.8	11.5	11.5	12.2	12.2	12.0
Saturation	%	84	86	85	84	87	92	89	85	85	92	85	83	83	88	88	86
BOD_5	mg/l O_2	4.3	5.0	5.8	5.2	5.0	5.2	4.8	5.1	5.5	5.6	6.2	5.1	4.9	4.9	4.0	4.3
COD	mg/l O_2	18.5	20.3	20.3	19.3	17.6	18.0	19.4	17.6	19.4	27.0	17.1	17.1	16.7	21.6	20.3	18.9
NH_3 - N	mg/l	2.15	2.59	2.26	2.46	2.39	2.36	2.40	2.32	2.32	2.32	1.80	1.74	1.67	1.90	2.55	2.28
NO_2 - N	"	0.023	0.047	0.045	0.045	0.028	0.050	0.045	0.028	0.040	0.037	0.030	0.030	0.030	0.034	0.030	0.034
NO_3 - N	"	0.88	1.02	0.87	0.80	0.81	0.88	0.81	0.81	0.83	0.81	0.83	0.83	0.83	0.76	0.73	0.81
Organic N	"	1.74	1.96	1.06	1.27	1.47	1.91	1.77	2.43	2.02	1.50	1.53	1.73	1.72	2.33	1.69	1.77
Residue:																	
Total	mg/l	473	473	502	505	475	491	491	495	461	457	359	418	412	434	458	451
Volatile	"	184	218	151	145	165	155	145	258	150	135	169	132	137	139	161	158
Fixed	"	289	255	351	360	310	336	346	237	311	322	190	286	275	295	297	293
Orthophosphate	mg/l PO_4	0.105	0.210	0.175	0.152	0.197	0.135	0.192	0.215	0.250	0.232	0.082	0.100	0.110	0.110	0.152	0.112
Total Phosphate	"	0.260	0.405	0.325	0.380	0.330	0.297	0.345	0.362	0.330	0.345	0.307	0.307	0.305	0.265	0.315	0.287

Physical and Chemical Analysis of Vistula Tributaries Water

December 1 - 3, 1975

Sampling stations / Analysis		Kurówka I	Wieprz II	Zagożdżonka III	Heated Water IV	Radomka V	Pilica VI	Jeziorka VII
Date		12.1	12.1	12.2	12.2	12.2	12.2	12.3
Hour		10^{50}	15^{10}	8^{20}	8^{50}	10^{40}	20^{00}	9^{45}
Temp. of air	°C	6	6	1	1	4	2	2
Temp. of water	°C	10,2	1.0	3.2	19.5	3.7	3.2	3.8
Turbicidity	mg/l SiO_2	17	23	17	36	40	23	55
Colour	mg/l Pt	35	45	40	45	45	40	50
Conductance	µS	700	450	440	580	330	340	460
Odor /cold/		1P	1P	1P	1P	1P/G	1P	1P/G
pH		7.5	7.5	7.2	7.6	7.2	7.5	6.8
DO	mg/l	9.7	11.0	9.0	9.6	9.1	12.0	9.7
Saturation	%	85	77	66	104	69	89	73
BOD_5	mg/l	5.8	7.3	4.0	5.1	7.3	4.8	21
COD	mg/l	24.7	26.1	22.5	17.1	35.1	18.9	49.5
NH_3 - N	mg/l	16.1	1.62	0.96	2.28	1.65	0.42	1.22
NO_2 - N	"	0.680	0.025	0.135	0.097	0.037	0.022	0.067
NO_3 - N	"	3.50	0.48	5.36	0.97	0.56	0.62	0.41
Organic N	"	21.3	2.20	1.17	1.82	2.57	1.21	2.32
Residue:								
Total	mg/l	556	365	404	486	267	237	422
Volatile	"	226	125	174	163	114	114	146
Fixed	"	330	240	230	323	153	123	276
Orthophosphate	mg/l PO_4	0.187	0.295	0.192	0.175	0.052	0.035	0.167
Total Phosphate	"	0.270	0.600	0.415	0.367	0.815	0.262	0.802

Enclosure 100

Results of water quality determination of Vistula River in Kozienice power-station obtained by every hour sampling over one day
15-16 April, 1979

Station No	Capacity MW	Time of sampling	Temperature of water °C	D.O mg/l	D.O %	BOD_5 mg/l O_2	Nitrite mg/l N	Ammonia mg/l N
1	2	3	4	5	6	7	8	9
3		13^{30}	6.8	9.5	78	4.5	0.004	0.52
IV	1200	13^{40}	18.6	10.1	108	4.5	0.008	0.48
IVa		13^{45}	17.4	10.1	109	3.9	0.009	0.62
4		13^{35}	7.4	9.8	82	4.2	0.003	0.66
3		14^{30}	6.4	9.8	80	3.6	0.009	0.44
IV	1170	14^{40}	17.8	9.7	101	3.7	0.014	0.54
IVa		14^{30}	16.0	9.7	97	3.2	0.011	0.58
4		15^{00}	6.8	10.2	84	4.5	0.002	0.86
3		15^{30}	6.2	10.3	82	4.1	0.004	0.66
IV	1170	15^{50}	17.8	9.5	99	3.4	0.015	0.64
IVa		16^{05}	17.2	10.1	103	4.0	0.009	0.72
4		16^{15}	6.8	10.0	82	4.3	0.004	0.72
3		16^{30}	6.2	10.0	80	4.0	0.004	0.54
IV	1200	16^{45}	17.6	9.0	94	2.6	0.009	0.48
IVa		16^{50}	17.0	9.3	95	3.1	0.006	0.46
4		16^{40}	6.6	9.6	79	3.9	0.004	0.66
3		18^{00}	6.4	10.0	80	3.6	0.004	0.58
IV	1330	18^{15}	18.0	9.6	100	3.2	0.011	0.52
IVa		18^{20}	16.8	9.5	97	3.1	0.014	0.54
4		18^{10}	6.8	9.6	79	3.2	0.009	0.64
3		19^{05}	6.6	9.8	80	3.2	0.015	0.58
IV	1600	19^{15}	20.0	9.3	101	3.3	0.014	0.50
IVa		19^{20}	19.2	9.8	104	3.8	0.011	0.52
		19^{10}	6.8	9.9	81	3.9	0.006	0.58
3		20^{10}	6.4	9.9	79	3.6	0.008	0.52
IV	1600	20^{30}	21.0	9.3	103	2.9	0.013	0.46
IVa		20^{40}	20.2	9.3	101	2.7	0.015	0.62
4		20^{00}	6.8	9.9	81	3.9	0.004	0.58
3		21^{00}	6.8	10.0	82	3.2	0.008	0.50
IV	1200	21^{20}	21.6	8.9	100	2.4	0.013	0.58
IVa		21^{45}	21.2	9.0	100	2.4	0.010	0.58
4		21^{15}	7.2	9.2	79	3.6	0.006	0.54
3		22^{00}	6.8	9.9	81	3.3	0.010	0.58
IV	1200	22^{30}	21.8	8.8	99	2.4	0.009	0.52
IVa		22^{50}	21.6	8.6	96	2.7	0.011	0.58
4		22^{20}	7.0	9.3	76	3.1	0.008	0.64
3		23^{05}	6.8	9.5	78	2.4	0.010	0.58
IV	1200	23^{30}	21.0	8.9	98	1.8	0.008	0.52
IVa		23^{35}	20.5	8.8	96	2.2	0.009	0.76
4		23^{20}	7.0	9.4	77	2.8	0.005	0.64

Enclosure 100 (continued)

1	2	3	4	5	6	7	8	9
3	1200	0^{10}	6.8	9.4	77	2.6	0.006	0.48
IV		0^{25}	19.4	9.1	97	2.8	0.006	0.52
IVa		0^{40}	15.6	8.9	89	2.0	0.005	0.58
4		0^{15}	7.0	9.5	78	3.5	0.006	0.58
3	1200	1^{10}	6.5	9.7	77	2.6	0.017	0.52
IV		1^{30}	19.5	9.5	101	1.9	0.022	0.54
IVa		1^{35}	18.0	9.5	99	1.6	0.017	0.58
4		1^{25}	6.8	9.6	79	2.4	0.013	0.58
3	1200	2^{00}	6.0	10.2	81	2.0	0.014	0.52
IV		2^{25}	19.8	9.9	107	2.1	0.015	0.52
IVa		2^{35}	18.4	9.8	102	2.0	0.016	0.50
4		2^{15}	6.6	10.1	83	2.4	0.013	0.54
3	1200	3^{00}	6.1	10.1	80	2.1	0.016	0.52
IV		3^{30}	19.6	9.7	105	1.9	0.013	0.64
IVa		3^{40}	18.4	9.6	100	2.1	0.011	0.62
4		3^{20}	6.6	10.1	83	2.8	0.008	0.54
3	1200	4^{10}	6.2	10.3	82	2.3	0.014	0.44
IV		4^{45}	19.5	9.7	103	2.1	0.013	0.54
IVa		4^{30}	18.3	9.7	101	1.9	0.013	0.62
4		4^{25}	6.8	10.1	83	2.4	0.009	0.58
3	1200	5^{00}	6.4	10.3	82	2.7	0.009	0.44
IV		5^{25}	19.8	9.6	102	2.0	0.010	0.54
IVa		5^{30}	18.2	9.7	101	2.4	0.015	0.54
4		5^{15}	6.8	10.0	82	3.1	0.010	0.58
3	1200	6^{15}	6.4	9.8	78	4.4	0.008	0.54
IV		6^{30}	18.6	9.4	100	4.4	0.016	0.50
IVa		6^{35}	18.0	9.7	101	5.4	0.017	0.58
4		6^{20}	6.8	10.1	83	5.5	0.013	0.58
3	1200	7^{15}	6.4	9.9	79	5.3	0.009	0.24
IV		7^{25}	18.6	9.2	98	5.0	0.011	0.24
IVa		7^{30}	18.0	9.9	103	4.9	0.014	0.34
4		7^{20}	6.8	10.4	85	5.8	0.013	0.34
3	1200	8^{10}	6.4	10.3	82	5.1	0.006	0.54
IV		8^{25}	18.8	9.5	101	4.8	0.011	0.34
IVa		8^{30}	18.0	9.8	102	5.0	0.011	0.40
4		8^{15}	6.8	10.3	85	5.3	0.009	0.50
3	1200	9^{05}	6.6	10.2	84	2.2	0.002	0.18
IV		9^{20}	18.6	9.9	105	2.5	0.013	0.09
IVa		9^{25}	18.0	10.1	105	2.3	0.014	0.20
4		9^{15}	6.8	10.3	89	3.0	0.008	0.16
3	1200	10^{10}	6.8	10.1	83	2.1	0.009	0.30
IV		10^{20}	19.0	9.5	101	2.0	0.009	0.24
IVa		10^{30}	18.2	9.4	98	1.6	0.005	0.16
4		10^{15}	7.0	10.0	82	2.5	0.011	0.16
3	1400	11^{10}	6.8	9.8	80	2.2	0.005	0.18
IV		11^{20}	19.2	9.6	102	2.2	0.008	0.09
IVa		11^{25}	18.0	9.7	101	2.3	0.013	0.10
4		11^{35}	7.0	10.1	83	2.6	0.008	0.05

Suspended solids data measured by means of Coulter Counter

7.23, 1975

Sample from station No 3 1

t_L	I	A	$\tilde{n}'$	n	V	d_L	Wt.%
20	2	8	24	24	18784	33.0	
"	1	8	121	121	9392	26.2	7.7
"	1	4	374	374	4696	20.8	16.8
"	1	2	729	730	2348	16.5	24
"	1	1	1595	1601	1174	13.1	32
"	1	1/2	2733	2752	587	10.4	37
"	1	1/4	16723	16935	293	8.3	71
"	1/2	1/4	29100	31217	146	6.5	88
"	1/4	1/4	31412	33879	73	5.2	90
"	1/4	1/8	58420	66952	36	4.1	99
"	1/8	1/8	61123	70463	18	3.3	100

Sample from station No 4 1

20	2	8	13	13	18784	33.0	
"	1	8	67	67	9392	26.2	3.9
"	1	4	266	266	4696	20.8	11.1
"	1	2	965	967	2348	16.5	24
"	1	1	2424	2439	1174	13.1	37
"	1	1/2	5164	5231	587	10.4	50
"	1	1/4	12782	13190	293	8.3	68
"	1/2	1/4	23577	24963	146	6.5	81
"	1/4	1/4	36938	40349	73	5.2	90
"	1/8	1/4	60144	69187	36	4.1	98
"	1/8	1/4	69040	80956	18	3.3	100

Sample from station No 4a1

20	2	8	28	28	18784	33.0	
"	1	8	78	78	9392	26.2	3.7
"	1	4	318	318	4696	20.8	12.5
"	1	2	974	976	2348	16.5	24
"	1	1	2496	2512	1174	13.1	38
"	1	1/2	5351	5423	587	10.4	52
"	1	1/4	12823	13234	293	8.3	70
"	1/2	1/4	23472	24849	146	6.5	83
"	1/4	1/4	36907	40312	73	5.2	92
"	1/8	1/4	51884	58613	36	4.1	97
"	1/8	1/8	64796	75293	18	3.3	100

Enclosure 102

Suspended solids data measured by means of Coulter Counter

8.21; 1975

Sample from station No 3 1

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt.%
20	4	8	15	15	37568	41.6	
"	2	8	37	37	18784	33.0	3.0
"	1	8	130	130	9392	26.2	9.4
"	1	4	464	464	4696	20.8	21
"	1	2	1008	1010	2348	16.5	30
"	1	1	2531	2547	1174	13.1	44
"	1	1/2	3740	3775	587	10.4	49
"	1	1/4	6371	6472	293	8.3	55
"	1/2	1/4	13193	13628	146	6.5	62
"	1/4	1/4	70743	83254	73	5.2	100
"	1/4	1/8	11279				

Sample from station No 4 1

20	4	8	2	2	37568	41.6	
"	2	8	5	5	13784	33.0	0.9
"	1	8	38	38	9392	26.2	6.2
"	1	4	190	190	4696	20.8	18.3
"	1	2	655	656	2348	16.5	36
"	1	1	1536	1542	1174	13.1	54
"	1	1/2	3275	3302	587	10.4	72
"	1	1/4	5774	5857	293	8.3	84
"	1/2	1/4	8084	8247	146	6.5	90
"	1/4	1/4	10769	11059	73	5.2	94
"	1/4	1/8	19908	20899	36	4.1	100

Sample from station No 4a1

20	2	4	17	17	9392	26.2	
"	1	4	65	65	4696	20.8	4.0
"	1	2	183	183	2348	16.5	8.9
"	1	1	685	686	1174	13.1	19.5
"	1	1/2	2751	2770	587	10.4	41
"	1	1/4	7221	7351	293	8.2	65
"	1/2	1/4	17170	17907	146	6.5	93
"	1/4	1/4	21842	23032	73	5.2	100

Suspended solids data measured by means of Coulter Counter
9.1, 1975

Sample from station No 3 1

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt.%
20	2	8	11	11	18784	33.0	
"	1	8	77	77	9392	26.2	4.1
"	1	4	311	311	4696	20.8	11.4
"	1	2	1008	1011	2348	16.5	22.3
"	1	1	3101	3125	1174	13.1	38.8
"	1	1/2	7822	7975	587	10.4	57.7
"	1	1/4	15994	16634	293.5	8.3	74.5
"	1/2	1/4	27639	29349	146.7	6.5	87.1
"	1/4	1/4	41427	45717	73.4	5.2	95.0
"	1/8	1/4	53468	60615	36.7	4.1	98.6
"	1/8	1/8	62239	71923	18.3	3.3	100.0

Sample from station No 4 1

20	2	8	35	35	18784	33.0	
"	1	8	160	160	9392	26.2	5.9
"	1	4	554	555	4696	20.8	15.2
"	1	2	1647	1654	2348	16.5	28.1
"	1	1	4430	4479	1174	13.1	44.6
"	1	1/2	9862	10105	587	10.4	61.2
"	1	1/4	20144	21158	293.5	8.3	77.4
"	1/2	1/4	33649	36480	146.7	6.5	88.6
"	1/4	1/4	50639	57050	73.4	5.2	96.2
"	1/8	1/4	58263	66749	36.7	4.1	97.8
"	1/8	1/8	74800	88787	18.3	3.3	100.0

Sample from station No 4a1

20	2	8	30	30	18784	33.0	
"	1	8	166	166	9392	26.2	5.7
"	1	4	587	588	4696	20.8	14.6
"	1	2	1763	1771	2348	16.5	26.9
"	1	1	4785	4842	1174	13.1	43.1
"	1	1/2	11945	12302	587	10.4	62.6
"	1	1/4	23455	24830	293.5	8.3	79.0
"	1/2	1/4	37319	40801	146.7	6.5	89.5
"	1/4	1/4	53580	60757	73.4	5.2	96.0
"	1/8	1/4	67720	79185	36.7	4.1	99.0
"	1/8	1/8	76192	90705	18.3	3.3	100.0

Suspended solids data measured by means of Coulter Counter

9.10, 1975

Sample from station No 3 1

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt.%
20	2	8	20	20	18784	33.0	4.2
"	1	8	97	97	9392	26.2	11.7
"	1	4	373	373	4696	20.8	27.1
"	1	2	1494	1500	2348	16.5	43.3
"	1	1	3847	3884	1174	13.1	61.7
"	1	1/2	9084	9290	587	10.4	77.0
"	1	1/4	17521	18288	293.5	8.3	86.7
"	1/2	1/4	27717	29637	146.7	6.5	96.5
"	1/4	1/4	47083	52625	73.4	5.2	99.1
"	1/8	1/4	56834	64909	36.7	4.1	100.0
"	1/8	1/8	63284	73296	18.3	3.3	

Sample from station No 4 1

20	2	8	25	25	18784	33.0	5.3
"	1	8	101	101	9392	26.2	13.8
"	1	4	346	346	4696	20.8	27.4
"	1	2	1127	1130	2348	16.5	46.1
"	1	1	3261	3287	1174	13.1	60.3
"	1	1/2	6448	6552	587	10.4	73.3
"	1	1/4	12195	12567	239.5	8.3	87.3
"	1/2	1/4	23977	25414	146.7	6.5	96.2
"	1/4	1/4	38211	41861	73.4	5.2	99.2
"	1/8	1/4	47246	52826	36.7	4.1	100.0
"	1/8	1/8	52178	58984	18.3	3.3	

Sample from station No 4a1

20	2	8	13	13	18784	33.0	4.6
"	1	8	84	84	9392	26.2	12.4
"	1	4	324	324	4996	20.8	26.6
"	1	2	1190	1194	2348	16.5	50.4
"	1	1	3215	3241	1174	13.1	65.6
"	1	1/2	6876	6994	587	10.4	77.6
"	1	1/4	12502	12893	293.5	8.3	89.8
"	1/2	1/4	23446	24820	146.7	6.5	95.8
"	1/4	1/4	33902	36775	73.4	5.2	98.3
"	1/8	1/4	42052	46473	36.7	4.1	100.0
"	1/8	1/8	52763	59723	18.3	3.3	

Suspended solids data measured by means of Coulter Counter

9.16, 1975

Sample from station No 3 1

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt.%
20	2	8	27	27	18784	33.0	
"	1	8	111	111	9392	26.2	5.7
"	1	4	422	422	4696	20.8	16.3
"	1	2	1421	1426	2348	16.5	33.5
"	1	1	3335	3363	1174	13.1	50.0
"	1	1/2	7464	7603	587	10.4	68.1
"	1	1/4	13239	13677	293.5	8.3	81.1
"	1/2	1/4	20820	21903	146.7	6.5	89.9
"	1/4	1/4	33446	36242	73.4	5.2	97.5
"	1/8	1/4	40478	44574	36.7	4.1	99.7
"	1/8	1/8	42090	46519	18.3	3.3	100.0

Sample from station No 4 1

20	2	8	17	17	18784	33.0	
"	1	8	53	53	9392	26.2	3.1
"	1	4	239	239	4696	20.8	11.1
"	1	2	778	780	2348	16.5	22.8
"	1	1	2218	2230	1174	13.1	38.4
"	1	1/2	5230	5298	587	10.4	54.9
"	1	1/4	11664	12004	293.5	8.3	73.0
"	1/2	1/4	21352	22492	146.7	6.5	87.1
"	1/4	1/4	34078	36981	73.4	5.2	96.9
"	1/8	1/4	41810	46180	36.7	4.1	100.0
"	1/8	1/8			18.3	3.3	

Sample from station No 4 m

20	2	8	17	17	18784	33.0	
"	1	8	81	81	9392	26.2	5.8
"	1	4	238	238	4696	20.8	12.9
"	1	2	810	812	2348	16.5	26.0
"	1	1	2041	2051	1174	13.1	40.1
"	1	1/2	4905	4965	587	10.4	56.6
"	1	1/4	11108	11416	293.5	8.3	74.9
"	1/2	1/4	17525	18293	146.7	6.5	84.7
"	1/4	1/4	30733	33094	73.4	5.2	95.2
"	1/8	1/4	41080	45299	36.7	4.1	99.5
"	1/8	1/8	43140	47793	18.3	3.3	100.0

Suspended solids data measured by means of Coulter Counter

9.16, 1975

Sample from station No 4 r

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	25	25	18784	33.0	
"	1	8	75	75	9392	26.2	3.8
"	1	4	310	310	4696	20.8	12.6
"	1	2	986	988	2348	16.5	25.4
"	1	1	2975	2997	1174	13.1	44.4
"	1	1/2	6528	6634	587	10.4	61.5
"	1	1/4	12821	13232	293.5	8.3	77.0
"	1/2	1/4	22773	24069	146.7	6.5	89.8
"	1/4	1/4	31694	34205	73.4	5.2	95.8
"	1/4	1/8	43697	48470	36.7	4.1	100.0
"	1/8	1/8	42779	48270	18.3	3.3	100.0

Sample from station No 4al

20	2	8	18	18	18784	33.0	
"	1	8	54	54	9392	26.2	2.5
"	1	4	271	271	4696	20.8	10.2
"	1	2	955	957	2348	16.5	22.4
"	1	1	2772	2791	1174	13.1	38.6
"	1	1/2	6249	6347	587	10.4	54.4
"	1	1/4	14551	15080	293.5	8.3	73.7
"	1/2	1/4	24708	26234	146.7	6.5	86.0
"	1/4	1/4	38806	42571	73.4	5.2	95.0
"	1/8	1/4	49846	56057	36.7	4.1	98.8
"	1/8	1/4	56814	64884	18.3	3.3	100.0

Sample from station No IV

20	2	8	22	22	18784	33.0	
"	1	8	82	82	9392	26.2	5.0
"	1	4	373	373	4696	20.8	17.2
"	1	2	1079	1082	2348	16.5	31.9
"	1	1	2642	2659	1174	13.1	48.4
"	1	1/2	5594	5672	587	10.4	64.1
"	1	1/4	11126	11435	293.5	8.3	79.2
"	1/2	1/4	18486	19340	146.7	6.5	89.5
"	1/4	1/4	28180	30165	73.4	5.2	96.6
"	1/8	1/4	36624	39977	36.7	4.1	99.7
"	1/8	1/8	37886	41474	18.3	3.3	100.0

Suspended solids data measured by means of Coulter Counter
10.7, 1975

Sample from station No 3 1

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	10	10	18784	33.0	
"	1	8	27	27	9392	26.2	2.5
"	1	4	153	153	4696	20.8	11.8
"	1	2	622	623	2348	16.5	29
"	1	1	1486	1491	1174	13.1	45
"	1	1/2	2915	2936	587	10.4	71
"	1	1/4	5311	5381	293.5	8.3	83
"	1/2	1/4	9774	9698	146.7	6.5	93
"	1/4	1/4	13905	14388	73.4	5.2	98
"	1/4	1/8	16700	17397	36.7	4.1	99
"	1/8	1/8	19095	20006	18.3	3.3	100

Sample from station No 4 1

20	2	8	9	9	18784	33.0	
"	1	8	32	32	9392	26.2	4.4
"	1	4	101	101	4696	20.8	11.1
"	1	2	368	368	2348	16.5	24
"	1	1	1070	1073	1174	13.1	41
"	1	1/2	2491	2506	587	10.4	58
"	1	1/4	5320	5391	293.5	8.3	75
"	1/2	1/4	7221	7351	146.7	6.5	81
"	1/4	1/4	15632	16240	73.4	5.2	94
"	1/4	1/8	22668	23956	36.7	4.1	99
"	1/8	1/8	25139	26714	18.3	3.3	100

Sample from station No 4 m

20	2	8	3	3	18784	33.0	
"	1	8	11	11	9392	26.2	3.2
"	1	4	48	48	4696	20.8	10.7
"	1	2	95	95	2348	16.5	15.5
"	1	1	302	302	1174	13.1	26
"	1	1/2	1082	1085	587	10.4	46
"	1	1/4	2675	2694	293	8.3	66
"	1/2	1/4	4695	4750	146	6.5	79
"	1/4	1/4	8406	8582	73.4	5.2	91
"	1/8	1/4	13615	14077	36.7	4.1	100
"	1/8	1/8	11405	11730	18.3	3.3	

Suspended solids data measured by means of Coulter Counter

10.7, 1975

Sample from station No 4 r

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	13	13	18784	33.0	
"	1	8	37	37	9392	26.2	5.5
"	1	4	82	82	4696	20.8	10.5
"	1	2	370	370	2348	16.5	27
"	1	1	797	799	1174	13.1	39
"	1	1/2	2139	2150	587	10.4	58
"	1	1/4	4656	4709	293	8.3	76
"	1/2	1/4	7755	7903	146	6.5	88
"	1/4	1/4	11312	11631	73.4	5.2	94
"	1/8	1/4	17069	17791	36.7	4.1	100
"	1/8	1/8	16392	17064	18.3	3.3	

Sample from station No 4al

20	2	8	9	9	18784	33.0	
"	1	8	57	57	9392	26.2	5.7
"	1	4	231	231	4696	20.8	16.0
"	1	2	750	751	2348	16.5	31
"	1	1	2173	2185	1174	13.1	52
"	1	1/2	4752	4808	587	10.4	72
"	1	1/4	7629	7774	293	8.3	83
"	1/2	1/4	13586	14047	146	6.5	94
"	1/4	1/4	15352	15941	73.4	5.2	96
"	1/8	1/4	22874	24181	36.7	4.1	100
"	1/8	1/8	21009				

Sample from station No IV

20	2	8	13	13	18784	33.0	
"	1	8	54	54	9392	26.2	5.1
"	1	4	156	156	4696	20.8	11.4
"	1	2	564	565	2348	16.5	24
"	1	1	1650	1656	1174	13.1	41
"	1	1/2	4022	4062	587	10.4	60
"	1	1/4	7847	8001	293	8.3	75
"	1/2	1/4	14083	14574	146	6.5	88
"	1/4	1/4	21808	22996	73.4	5.2	96
"	1/8	1/4	29136	31253	36.7	4.1	100
"	1/8	1/8	28191				

Suspended solids data measured by means of Coulter Counter

10.21,1975

Sample from station No 3 1

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	4	4	18784	33.0	
"	1	8	12	12	9392	26.2	2.1
"	1	4	81	81	4696	20.8	11.0
"	1	2	336	336	2348	16.5	28
"	1	1	817	819	1174	13.1	44
"	1	1/2	1732	1739	587	10.4	59
"	1/2	1/4	3708	3742	293	8.3	75
"	1/2	1/4	6487	6592	146	6.5	87
"	1/4	1/4	10474	10748	73	5.2	96
"	1/8	1/4	11820	12169	36	4.1	97
"	1/8	1/8	16829	17537	18	3.3	100

Sample from station No 4 1

20	2	8	10	10	18784	33.0	
"	1	8	41	41	9392	26.2	5.1
"	1	4	138	138	4696	20.8	13.0
"	1	2	405	405	2348	16.5	24
"	1	1	1222	1225	1174	13.1	41
"	1	1/2	2902	2923	587	10.4	58
"	1	1/4	5758	5851	293	8.3	72
"	1/2	1/4	10411	10682	146	6.5	85
"	1/4	1/4	16519	17201	73	5.2	93
"	1/8	1/4	21662	22835	36	4.1	97
"	1/8	1/8	30759	33124	18	3.3	100

Sample from station No 4 m

20	2	8	4	4	18784	33.0	
"	1	8	15	15	9392	26.2	2.8
"	1	4	61	61	4696	20.8	8.6
"	1	2	227	227	2348	16.5	19
"	1	1	756	757	1174	13.1	36
"	1	1/2	1981	1991	587	10.4	55
"	1/2	1/4	3875	3912	293	8.3	70
"	1/2	1/4	6797	6912	146	6.5	82
"	1/4	1/4	12206	12578	73	5.2	93
"	1/4	1/8	14585	15117	36	4.1	96
"	1/8	1/8	22141	23366	18	3.3	100

Suspended solids data measured by means of Coulter Counter

10.21,1975

Sample from station No 4 r

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	8	8	18784	33.0	
"	1	8	35	35	9392	26.2	5.1
"	1	4	78	78	4696	20.8	9.1
"	1	2	206	206	2348	16.5	15
"	1	1	728	729	1174	13.1	27
"	1	1/2	2607	2624	587	10.4	50
"	1	1/4	6130	6224	293	8.3	71
"	1/2	1/4	10551	10829	146	6.5	84
"	1/4	1/4	17141	17875	73	5.2	95
"	1/4	1/8	19734	20707	36	4.1	97
"	1/8	1/8	26931	28744	18	3.3	100

Sample from station No 4a1

20	2	8	8	8	18784	33.0	
"	1	8	23	23	9392	26.2	3.0
"	1	4	99	99	4696	20.8	10
"	1	2	369	369	2348	16.5	24
"	1	1	986	988	1174	13.1	39
"	1	1/2	2196	2208	587	10.4	54
"	1	1/4	4446	4495	293	8.3	68
"	1/2	1/4	8058	8220	146	6.5	80
"	1/4	1/4	16106	16754	73	5.2	93
"	1/4	1/8	19613	20575	36	4.1	96
"	1/8	1/8	28635	30685	18	3.3	100

Sample from station No IV

20	2	8	9	9	18784	33.0	
"	1	8	24	24	9392	26.2	2.9
"	1	4	107	107	4696	20.8	10
"	1	2	345	345	2348	16.5	22
"	1	1	972	974	1174	13.1	37
"	1	1/2	2520	2536	587	10.4	56
"	1	1/4	4739	4795	293	8.3	70
"	1/2	1/4	9866	10109	146	6.5	86
"	1/4	1/4	15156	15730	73	5.2	94
"	1/4	1/8	17953	18759	36	4.1	97
"	1/8	1/8	25844	27514	18	3.3	100

Suspended solids data measured by means of Coulter Counter

11.12.1975

Sample from station No 3 1

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	3	3	18784	33.0	
"	1	8	10	10	9392	26.2	3.6
"	1	4	37	37	4696	20.8	7.3
"	1	2	141	141	2348	16.5	14
"	1	1	471	471	1174	13.1	26
"	1	1/2	1210	1214	587	10.4	39
"	1	1/4	3282	3309	293	8.3	57
"	1/2	1/4	6597	6706	146	6.5	71
"	1/4	1/4	11954	12311	73	5.2	83
"	1/8	1/4	17310	18059	36	4.1	96
"	1/8	1/8	24589	26100	18	3.3	100

Sample from station No 4 1

20	2	8	2	2	18784	33.0	
"	1	8	16	16	9392	26.2	5.5
"	1	4	54	54	4696	20.8	11
"	1	2	171	171	2348	16.5	20
"	1	1	457	457	1174	13.1	31
"	1	1/2	1153	1156	587	10.4	45
"	1	1/4	2970	2992	293	8.3	62
"	1/2	1/4	5757	5840	146	6.5	76
"	1/4	1/4	10972	11273	73	5.2	87
"	1/8	1/4	15721	16339	36	4.1	95
"	1/8	1/8	22746	24039	18	3.3	100

Sample from station No 4 m

20	2	8	5	5	18784	33.0	
"	1	8	17	17	9392	26.2	4.0
"	1	4	75	75	4696	20.8	10
"	1	2	232	232	2348	16.5	19
"	1	1	703	704	1174	13.1	33
"	1	1/2	1631	1637	587	10.4	46
"	1	1/4	4264	4309	293	8.3	65
"	1/2	1/4	7946	8104	146	6.5	78
"	1/4	1/4	13505	13961	73	5.2	88
"	1/8	1/4	20604	21665	36	4.1	95
"	1/8	1/8	30380	32687	18	3.3	100

Suspended solids data measured by means of Coulter Counter

11.12.1975

Sample from station No 4 r

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	12	12	18784	33.0	
"	1	8	47	47	9392	26.2	11
"	1	4	140	140	4696	20.8	21
"	1	2	391	391	2348	16.5	33
"	1	1	762	763	1174	13.1	43
"	1	1/2	1842	1850	587	10.4	57
"	1	1/4	4392	4440	293	8.3	73
"	1/2	1/4	7423	7561	146	6.5	83
"	1/4	1/4	12870	13284	73	5.2	92
"	1/8	1/4	19038	19944	36	4.1	97
"	1/8	1/8	24626	26142	18	3.3	100

Sample from station No 4al

20	2	8	11	11	18784	33.0	
"	1	8	47	47	9392	26.2	11
"	1	4	134	134	4696	20.8	20
"	1	2	343	343	2348	16.5	31
"	1	1	814	816	1174	13.1	44
"	1	1/2	1857	1866	587	10.4	58
"	1	1/4	3790	3826	293	8.3	71
"	1/2	1/4	7321	7455	146	6.5	83
"	1/4	1/4	13769	14243	73	5.2	94
"	1/8	1/4	17098	17828	36	4.1	97
"	1/8	1/8	22574	23848	18	3.3	100

Sample from station No IV

20	2	8	23	23	18784	33.0	
"	1	8	76	76	9392	26.2	10
"	1	4	240	240	4696	20.8	20
"	1	2	592	592	2348	16.5	31
"	1	1	1349	1353	1174	13.1	42
"	1	1/2	3046	3069	587	10.4	55
"	1	1/4	7162	7290	293	8.3	71
"	1/2	1/4	12159	12529	146	6.5	81
"	1/4	1/4	21000	22102	73	5.2	90
"	1/8	1/4	31759	34280	36	4.1	96
"	1/8	1/8	45625	50829	18	3.3	100

Suspended solids data measured by means of Coulter Counter

12.3,1975

Sample from station No 3 1

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	13	13	18784	33.0	
"	1	8	34	34	9392	26.2	7.9
"	1	4	109	109	4696	20.8	15
"	1	2	261	261	2348	16.5	23
"	1	1	697	698	1174	13.1	34
"	1	1/2	1560	1566	587	10.4	45
"	1	1/4	3779	3815	293	8.3	59
"	1/2	1/4	8234	8403	146	6.5	74
"	1/4	1/4	14754	15298	73	5.2	85
"	1/8	1/4	23294	24650	36	4.1	92
"	1/8	1/8	45071	45071	18	3.3	100

Sample from station No 4 1

20	2	8	18	18	18784	33.0	
"	1	8	49	49	9392	26.2	8.0
"	1	4	145	145	4696	20.8	15
"	1	2	416	416	2348	16.5	24
"	1	1	1098	1101	1174	13.1	36
"	1	1/2	2498	2514	587	10.4	49
"	1	1/4	6443	6547	293	8.3	66
"	1/2	1/4	12320	12699	146	6.5	80
"	1/4	1/4	20132	21145	73	5.2	89
"	1/8	1/4	29913	32150	36	4.1	95
"	1/8	1/8	43962	48794	18	3.3	100

Sample from station No 4 m

20	2	8	15	15	18784	33.0	
"	1	8	49	49	9392	26.0	9.6
"	1	4	157	157	4696	20.8	18
"	1	2	385	385	2348	16.5	27
"	1	1	1009	1011	1174	13.1	40
"	1	1/2	2264	2277	587	10.4	52
"	1	1/4	5343	5414	293	8.3	68
"	1/2	1/4	9991	10240	146	6.5	80
"	1/4	1/4	16868	17579	73	5.2	89
"	1/8	1/4	25136	26715	36	4.1	95
"	1/8	1/8	38785	42545	18	3.3	100

Suspended solids data measured by means of Coulter Counter

12.3,1975

Sample from station No 4 r

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	9	9	18784	33.0	
"	1	8	39	39	9392	26.2	7.9
"	1	4	151	151	4696	20,8	18
"	1	2	381	381	2348	16,5	28
"	1	1	917	919	1174	13,1	41
"	1	1/2	1949	1958	587	10,4	52
"	1	1/4	4337	4384	293	8,3	66
"	1/2	1/4	8448	8626	146	6,5	78
"	1/4	1/4	13764	14237	73	5,2	86
"	1/8	1/4	22045	23259	36	4,1	92
"	1/8	1/8	40556	44667	18	3,3	100

Sample from station No 4a1

20	2	8	18	18	18784	33.0	
"	1	8	69	69	9392	26,2	13
"	1	4	173	173	4696	20,8	22
"	1	2	465	465	2348	16,5	35
"	1	1	1065	1068	1174	13,1	48
"	1	1/2	2210	2222	587	10,4	60
"	1	1/4	4519	4570	293	8,3	73
"	1/2	1/4	8287	8459	146	6,5	84
"	1/4	1/4	13980	14469	73	5,2	92
"	1/8	1/4	20512	21564	36	4,1	97
"	1/8	1/8	29326	31476	18	3,3	100

Sample from station No IV

20	2	8	4	4	18784	33.0	
"	1	8	12	12	9392	26,2	3,1
"	1	4	46	46	4696	20,8	7,4
"	1	2	138	138	2348	16,5	12
"	1	1	404	404	1174	13,1	22
"	1	1/2	1080	1083	587	10,4	32
"	1	1/4	3064	3087	293	8,3	48
"	1/2	1/4	6625	6735	146	6,5	63
"	1/4	1/4	13502	13958	73	5,2	77
"	1/8	1/4	22170	23399	36	4,1	87
"	1/8	1/8	45090	50173	18	3,3	100

Suspended solids data measured by means of Coulter Counter

Sample 1, test 15 min., temperature 5°C

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	2	2	18784	33.0	
"	1	8	7	7	9392	26.2	2.4
"	1	4	26	26	4696	20.8	5.6
"	1	2	73	73	2348	16.5	9.6
"	1	1	277	277	1174	13.1	18.3
"	1	1/2	998	1001	587	10.4	34
"	1	1/4	3033	3056	293	8.3	56
"	1/2	1/4	6095	6188	146	6.5	72
"	1/4	1/4	10811	11103	73	5.2	86
"	1/8	1/4	16615	17305	36	4.1	94
"	1/8	1/8	25200	26788	18	3.3	100

20	2	8	3	3	18784	33.0	
"	1	8	10	10	9392	26.2	1.7
"	1	4	14	14	4696	20.8	2.2
"	1	2	110	110	2348	16.5	8.0
"	1	1	481	481	1174	13.1	19.3
"	1	1/2	1568	1574	587	10.4	36
"	1	1/4	4621	4674	293	8.3	59
"	1/2	1/4	9988	10237	146	6.5	80
"	1/4	1/4	14938	15496	73	5.2	90
"	1/8	1/4	21159	22278	36	4.1	97
"	1/8	1/8	27276	29136	18	3.3	100

20	2	8	1	1	18784	33.0	
"	1	8	6	6	9392	26.2	1.6
"	1	4	25	25	4696	20.8	4.8
"	1	2	96	96	2348	16.5	10.7
"	1	1	341	341	1174	13.1	21
"	1	1/2	1116	1119	587	10.4	37
"	1	1/4	3247	3273	293	8.3	59
"	1/2	1/4	6233	6330	146	6.5	75
"	1/4	1/4	10569	10848	73	5.2	87
"	1/8	1/4	16817	17524	36	4.1	95
"	1/8	1/8	23610	25004	18	3.3	100

Suspended solids data measured by means of Coulter Counter

Sample 1, test 15 min., temperature 10°C

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	4	4	18784	33.0	
"	1	8	12	12	9392	26.2	2.9
"	1	4	33	33	4696	20.8	5.2
"	1	2	162	162	2348	16.5	12.0
"	1	1	568	568	1174	13.1	23
"	1	1/2	1857	1865	587	10.4	40
"	1	1/4	5004	5067	293	8.3	61
"	1/2	1/4	8804	8998	146	6.5	74
"	1/4	1/4	16080	16726	73	5.2	86
"	1/8	1/4	25143	26723	36	4,1	94
"	1/8	1/8	37194	40652	18	3.3	100

20	2	8	2	2	18784	33.0	
"	1	8	16	16	9392	26.2	2.9
"	1	4	55	55	4696	20.8	6.5
"	1	2	234	234	2348	16.5	14.6
"	1	1	736	736	1174	13.1	26
"	1	1/2	2302	2315	587	10.4	44
"	1	1/4	5296	5366	293	8.3	61
"	1/2	1/4	9752	9990	146	6.5	75
"	1/4	1/4	16268	16930	73	5.2	84
"	1/8	1/4	26563	28327	36	4.1	93
"	1/8	1/8	44670	49658	18	3.3	100

20	2	8	5	5	18784	33.0	
"	1	8	13	13	9392	26.2	3.1
"	1	4	54	54	4696	20.8	7.1
"	1	2	165	165	2348	16.5	12.5
"	1	1	516	516	1174	13.1	21
"	1	1/2	1847	1856	587	10.4	37
"	1	1/4	4757	4814	293	8.3	55
"	1/2	1/4	8760	8957	146	6.5	68
"	1/4	1/4	16213	16870	74	5.2	80
"	1/8	1/4	28309	30312	36	4.1	90
"	1/8	1/8	50428	56785	18	3.3	100

Suspended solids data measured by means of Coulter Counter

Sample 1, test 15 min., temperature 20°C

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	5	5	18784	33.0	
"	1	8	19	19	9392	26.2	3.3
"	11	4	60	60	4696	20.8	6.7
	1	2	203	203	2348	16.5	12.6
	1	.1	728	728	1174	13.1	23
"	1	1/2	2404	2418	587	10.4	41
"	1	1/4	5702	5783	293	8.3	58
"	1/2	1/4	10715	11002	146	6.5	71
"	1/4	1/4	18513	19370	73	5.2	82
"	1/8	1/4	28045	30011	36	4.1	94
"	1/8	1/8	43118	47766	18	3.3	100

20	2	8	3	3	18784	33.0	
"	1	8	8	8	9392	26.2	1.0
"	1	4	42	42	4696	20.8	7.9
"	1	2	162	162	2348	16.5	13.9
"	1	1	547	547	1174	13.1	23
"	1	1/2	1796	1804	587	10.4	39
"	1	1/4	4345	4392	293	8.3	55
"	1/2	1/4	9664	9897	146	6.5	72
"	1/4	1/4	13658	14124	73	5.2	79
"	1/8	1/4	26878	28684	36	4.1	90
"	1/8	1/8	48541	54431	18	3.3	100

20	2	8	3	3	18784	33.0	
"	1	8	13	13	9392	26.2	2.6
"	1	4	51	51	4696	20.8	6.2
"	1	2	194	194	2348	16.5	12.9
"	1	1	598	598	1174	13.1	22
"	1	1/2	2101	2112	587	10.4	40
"	1	1/4	4567	4619	293	8.3	55
"	1/2	1/4	8457	8636	146	6.5	66
"	1/4	1/4	15136	15709	73	5.2	77
"	1/8	1/4	24656	26176	36	4.1	92
"	1/8	1/8	43579	48327	18	3.3	100

Suspended solids data measured by means of Coulter Counter

Sample 1, test 15 min., temperature 32°C

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	4	4	18784	33.0	
"	1	8	14	14	9392	26.2	3.0
"	1	4	45	45	4696	20.8	6.3
"	1	2	174	174	2348	16.5	15.1
"	1	1	467	467	1174	13.1	24
"	1	1/2	1331	1335	587	10.4	38
"	1	1/4	3585	3617	293	8.3	56
"	1/2	1/4	7268	7400	146	6.5	71
"	1/4	1/4	12651	13051	73	5.2	82
"	1/8	1/4	23107	24442	36	4.1	93
"	1/8	1/8	35310	38427	18	3.3	100

20	2	8	3	3	18784	33.0	
"	1	8	13	13	9392	26.2	3.0
"	1	4	46	46	4696	20.8	6.5
"	1	2	151	151	2348	16.5	12.2
"	1	1	567	567	1174	13.1	23
"	1	1/2	1788	1796	587	10.4	40
"	1/2	1/4	4782	4839	293	8.3	60
"	1/2	1/4	8669	8857	146	6.5	74
"	1/4	1/4	14483	15007	73	5.2	82
"	1/8	1/4	23530	24914	36	4.1	92
"	1/8	1/8	39316	43180	18	3.3	100

20	2	8	10	10	18784	33.0	
"	1	8	46	46	9392	26.2	5.1
"	1	4	152	152	4696	20.8	10.1
"	1	2	632	632	2348	16.5	21
"	1	1	1856	1865	1174	13.1	48
"	1	1/2	5059	5623	587	10.4	70
"	1	1/4	7166	7294	293	8.3	75
"	1/2	1/4	11955	12312	146	6.5	83
"	1/4	1/4	18884	19776	73	5.2	88
"	1/8	1/4	30823	33198	36	4.1	93
"	1/8	1/8	61487	70939	18	3.3	100

Enclosure 114

Suspended solids data measured by means of Coulter Counter

Sample 2, test 15 min., temperature 5°C

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	10	10	18784	33.0	1.7
"	1	8	22	22	9392	26.2	3.6
"	1	4	77	77	4696	20.8	19.7
"	1	2	1040	1043	2348	16.5	43
"	1	1	3795	3831	1174	13.1	77
"	1	1/2	11671	12011	587	10.4	87
"	1	1/4	16270	16932	293	8.3	90
"	1/2	1/4	18793	19676	146	6.5	93
"	1/4	1/4	22594	23870	73	5.2	95
"	1/8	1/4	32073	34645	36	4.1	100
"	1/8	1/8	61029	70340	18	3.3	

20	2	8	6	6	18784	33.0	0.8
"	1	8	12	12	9392	26.2	2.8
"	1	4	72	72	4696	20.8	18.8
"	1	2	1019	1021	2348	16.5	54
"	1	1	5156	5222	1174	13.1	80
"	1	1/2	11066	11372	587	10.4	89
"	1	1/4	14944	15502	293	8.3	91
"	1/2	1/4	17174	17911	146	6.5	94
"	1/4	1/4	21959	23164	73	5.2	96
"	1/8	1/4	27489	29378	36	4.1	100
"	1/8	1/8	54202	61547	18	3.3	

20	2	8	9	9	18784	33.0	1.3
"	1	8	18	18	9392	26.2	3.7
"	1	4	90	90	4696	20.8	22
"	1	2	1205	1209	2348	16.5	46
"	1	1	4242	4287	1174	13.1	81
"	1	1/2	12487	12876	587	10.4	88
"	1	1/4	15924	16558	293	8.3	92
"	1/2	1/4	19123	20037	146	6.5	94
"	1/4	1/4	23714	25119	73	5.2	97
"	1/8	1/4	31404	33869	36	4.1	100
"	1/8	1/8	54111	61431	18	3.3	

Suspended solids data measured by means of Coulter Counter

Sample 2, test 15 min., temperature 10°C

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	7	7	18784	33.0	
"	1	8	13	13	9392	26.2	0.4
"	1	4	54	54	4696	20.8	2.0
"	1	2	1102	1105	2348	16.5	22
"	1	1	2782	2801	1174	13.1	38
"	1	1/2	10731	11019	587	10.4	78
"	1	1/4	15364	15954	293	8.3	89
"	1/2	1/4	17409	18167	146	6.5	92
"	1/4	1/4	21739	22920	73	5.2	95
"	1/8	1/4	27898	29844	36	4.1	97
"	1/8	1/8	44724	49724	18	3.3	100

20	2	8	14	14	18784	33.0	
"	1	8	16	16	9392	26.2	1.7
"	1	4	51	51	4696	20.8	3.1
"	1	2	527	527	2348	16.5	12.5
"	1	1	2904	2925	1174	13.1	36
"	1	1/2	10526	10803	587	10.4	75
"	1	1/4	15031	15596	293	8.3	87
"	1/2	1/4	17400	18157	146	6.5	90
"	1/4	1/4	21793	22980	73	5.2	93
"	1/8	1/4	29217	31351	36	4.1	96
"	1/8	1/8	52924	59926	18	3.3	100

20	2	8	6	6	18784	33.0	
"	1	8	16	16	9392	26.2	0.8
"	1	4	157	157	4696	20.8	4.8
"	1	2	1619	1625	2348	16.5	25
"	1	1	5653	5733	1174	13.1	55
"	1	1/2	13478	13932	587	10.4	84
"	1	1/4	17247	17991	293	8.3	91
"	1/2	1/4	19901	20891	146	6.5	94
"	1/4	1/4	25604	27243	73	5.2	97
"	1/8	1/4	31444	33916	36	4.1	98
"	1/8	1/8	44888	49925	18	3.3	100

Suspended solids data measured by means of Coulter Counter

Sample 2, test 15 min., temperature 20°C

t_L	I	ΔA	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	5	5	18784	33.0	
"	1	8	15	15	9392	26.2	1.4
"	1	4	30	30	4696	20.8	2.2
"	1	2	212	212	2348	16,5	7.4
"	1	1	1662	1669	1174	13,1	28
"	1	1/2	6666	6777	587	10.4	65
"	1	1/4	13176	13610	293	8.3	89
"	1/2	1/4	15948	16584	146	6.5	95
"	1/4	1/4	18687	19560	73	5.2	97
"	1/8	1/4	20744	21820	36	4.1	98
"	1/8	1/8	30050	32307	18	3.3	100

20	2	8	5	5	18784	33.0	
"	1	8	14	14	9392	26.2	0.7
"	1	4	108	108	4696	20.8	3.7
"	1	2	1315	1319	2348	16.5	23
"	1	1	4549	4600	1174	13.1	50
"	1	1/2	12136	12504	587	10.4	81
"	1	1/4	15720	16338	293	8.3	89
"	1/2	1/4	18699	19573	146	6.5	92
"	1/4	1/4	23488	24867	73	5.2	95
"	1/8	1/4	29550	31733	36	4,1	97
"	1/8	1/8	51162	57706	18	3.3	100

20	2	8	4	4	18784	33.0	
"	1	8	10	10	9392	26,2	0.6
"	1	4	83	83	4696	20.8	3.0
"	1	2	1211	1215	2348	16.5	21
"	1	1	4482	4532	1174	13.1	49
"	1	1/2	11818	12167	587	10.4	80
"	1	1/4	15307	15893	293	8.3	88
"	1/2	1/4	18066	18882	146	6.5	91
"	1/4	1/4	22157	23384	73	5.2	93
"	1/8	1/4	37091	40530	36	4.1	97
"	1/8	1/8	52898	59893	18	3.3	100

Suspended solids data measured by means of Coulter Counter

Sample 2, test 15 min., temperature 32°C

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	6	6	18784	33.0	
"	1	8	12	12	9392	26.2	0.7
"	1	4	60	60	4696	20.8	2.3
"	1	2	979	982	2348	16.5	17.7
"	1	1	3934	3973	1174	13.1	43
"	1	1/2	12150	12519	587	10.4	78
"	1	1/4	15596	16204	293	8.3	86
"	1/2	1/4	18612	19278	146	6.5	89
"	1/4	1/4	23426	24798	73	5.2	92
"	1/8	1/4	32515	35158	36	4.1	95
"	1/8	1/8	63390	73436	18	3.3	100

20	2	8	5	5	18784	33.0	
"	1	8	15	15	9392	26.2	0.8
"	1	4	79	79	4696	20.8	2.9
"	1	2	1214	1218	2348	16.5	21
"	1	1	4264	4309	1174	13.1	46
"	1	1/2	12505	12896	587	10.4	81
"	1	1/4	16049	16693	293	8.3	88
"	1/2	1/4	18281	19116	146	6.5	91
"	1/4	1/4	22274	23514	73	5.2	93
"	1/8	1/4	31195	33628	36	4.1	95
"	1/8	1/8	60277	69360	18	3.3	100

20	2	8	4	4	18784	33.0	
"	1	8	12	12	9392	26.2	1.2
"	1	4	40	40	4696	20.8	2.3
"	1	2	614	615	2348	16.5	14.3
"	1	1	2853	2873	1174	13.1	37
"	1	1/2	10042	10294	587	10.4	76
"	1	1/4	14865	15417	293	8.3	90
"	1/2	1/4	17020	17744	146	6.5	93
"	1/4	1/4	20464	21511	73	5.2	95
"	1/8	1/4	24675	26197	36	4.1	97
"	1/8	1/8	41485	45787	18	3.3	100

Suspended solids data measured by means of Coulter Counter

Sample 1, test 5 h, temperature 5°C

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	114	114	18784	33.0	9.7
"	1	8	406	406	9392	26.2	24
"	1	4	1260	1264	4696	20.8	42
"	1	2	3395	3424	2348	16.5	59
"	1	1	7321	7455	1174	13.1	72
"	1	1/2	13316	13759	587	10.4	84
"	1	1/4	24438	25931	293	8.3	90
"	1/2	1/4	34638	37637	146	6.5	94
"	1/4	1/4	47328	52928	73	5.2	98
"	1/4	1/8	66032	76932	36	4.1	100
"	1/8	1/8	68637	80414	18	3.3	

Sample 1, test 5 h, temperature 10°C

20	2	8	43	43	18784	33.0	5.4
"	1	8	121	121	9392	26.2	16
"	1	4	443	443	4696	20.8	30
"	1	2	1219	1223	2348	16.5	47
"	1	1	3164	3189	1174	13.1	65
"	1	1/2	7253	7384	587	10.4	83
"	1	1/4	14897	15452	293	8.3	92
"	1/2	1/4	22782	24079	146	6.5	98
"	1/4	1/4	31512	33994	73	5.2	99
"	1/8	1/4	37963	41566	36	4,1	100
"	1/8	1/8	39469	43363	18	3.3	

Sample 1, test 5 h, temperature 20°C

20	2	8	12	12	18784	33.0	4.7
"	1	8	68	68	9392	26.2	10
"	1	4	203	203	4696	20,8	19
"	1	2	596	596	2348	16.5	30
"	1	1	1689	1696	1174	13.1	52
"	1	1/2	4768	4825	587	10.4	72
"	1	1/4	13665	14132	293	8.3	84
"	1/2	1/4	22420	23677	146	6.5	94
"	1/4	1/4	35796	38999	73	5.2	100
"	1/8	1/4	49296	55371	36	4.1	100
"	1/8	1/8	45669	55371	18	3.3	

Suspended solids data measured by means of Coulter Counter

Sample 2, test 5 h, temperature 5°C

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	104	104	18784	33.0	
"	1	8	374	374	9392	26.2	9.8
"	1	4	983	985	4696	20,8	21
"	1	2	2394	2408	2348	16,5	34
"	1	1	5859	5945	1174	13.1	50
"	1	1/2	13357	13803	587	10,4	58
"	1	1/4	23579	24969	293	8.3	81
"	1/2	1/4	36975	40393	146	6,5	89
"	1/4	1/4	49592	55470	73	5,2	97
"	1/4	1/8	66353	77359	36	4,1	99
"	1/8	1/8	68074	79659	18	3.3	100

Sample 2, test 5 h, temperature 10°C

20	2	8	42	42	18784	33.0	
"	1	8	174	174	9392	26.2	8.9
"	1	4	551	552	4696	20.8	21
"	1	2	1640	1647	2348	16.5	40
"	1	1	3966	4005	1174	13.1	60
"	1	1/2	7650	7796	587	10.4	76
"	1	1/4	13426	13876	293	8.3	89
"	1/2	1/4	21227	22353	146	6.5	97
"	1/4	1/4	27259	29117	73	5,2	98
"	1/8	1/4	30183	32460	36	4,1	99
"	1/8	1/8	34452	37419	18	3.3	100

Sample 2, test 5 h, temperature 20°C

20	2	8	32	32	18784	33.0	
"	1	8	103	103	9392	26,2	6.1
"	1	4	345	345	4696	20.8	16
"	1	2	1024	1027	2348	16.5	31
"	1	1	2803	2823	1174	13,1	50
"	1	1/2	6136	6230	587	10.4	69
"	1	1/4	11333	11654	293	8,3	83
"	1/2	1/4	16915	17630	146	6.5	91
"	1/4	1/4	23801	25217	73	5.2	97
"	1/8	1/4	31942	34493	36	4.1	99
"	1/8	1/8	33358	36140	18	3,3	100

Suspended solids data measured by means of Coulter Counter

Sample 2, test 5 h, temperature 32°C

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	3	3	18784	33.0	
"	1	8	11	11	9392	26.2	1.2
"	1	4	57	57	4696	20.8	4.8
"	1	2	158	158	2348	16.5	8.7
"	1	1	564	564	1174	13.1	16
"	1	1/2	1974	1984	587	10.4	30
"	1	1/4	6947	7067	293	8.3	54
"	1/2	1/4	17532	18300	146	6.5	81
"	1/4	1/4	26493	28248	73	5.2	93
"	1/8	1/4	35817	39024	36	4.1	100
"	1/8	1/8	32496	39024	18	3.3	100

Sample 3, test 5 h, temperature 5°C

20	2	8	19	19	18784	33.0	
"	1	8	73	73	9392	26.2	6.1
"	1	4	272	272	4696	20.8	17
"	1	2	798	799	2348	16.5	32
"	1	1	1834	1842	1174	13.1	47
"	1	1/2	4443	4492	587	10.4	66
"	1	1/4	8821	9015	293	8.3	82
"	1/2	1/4	12688	13090	146	6.5	89
"	1/4	1/4	18379	19223	73	5.2	95
"	1/8	1/4	24075	25524	36	4.1	98
"	1/8	1/8	32897	35602	18	3.3	100

Sample 3, test 5 h, temperature 10°C

20	2	8	36	36	18784	33.0	
"	1	8	145	145	9392	26.2	9
"	1	4	410	410	4696	20.8	21
"	1	2	1070	1073	2348	16.5	36
"	1	1	2452	2467	1174	13.1	52
"	1	1/2	5201	5268	587	10.4	68
"	1	1/4	9647	9880	293	8.3	81
"	1/2	1/4	14868	15421	146	6.5	89
"	1/4	1/4	21742	22923	73	5.2	94
"	1/8	1/4	28998	31100	36	4.1	97
"	1/8	1/8	40543	44652	18	3.3	100

Suspended solids data measured by means of Coulter Counter

Sample 3, test 5 h, temperature 20°C

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	14	14	18784	33.0	
"	1	8	67	67	9392	26.2	8.3
"	1	4	214	214	4696	20.8	20
"	1	2	627	628	2348	16.5	36
"	1	1	1527	1533	1174	13.1	54
"	1	1/2	3236	3262	587	10.4	71
"	1	1/4	5535	5611	293	8.3	82
"	1/2	1/4	8604	8789	146	6.5	90
"	1/4	1/4	13317	13760	73	5.2	96
"	1/8	1/4	17722	18507	36	4.1	99
"	1/8	1/8	19888	20877	18	3.3	100

Sample 3, test 5 h, temperature 32°C

20	2	8	31	31	18784	33.0	
"	1	8	115	115	9392	26.2	9.1
"	1	4	317	317	4696	20.8	20
"	1	2	804	806	2348	16.5	33
"	1	1	1895	1904	1174	13.1	48
"	1	1/2	3864	3901	587	10.4	62
"	1	1/4	8865	9061	293	8.3	79
"	1/2	1/4	13496	13951	146	6.5	88
"	1/4	1/4	19991	20990	73	5.2	93
"	1/8	1/4	27174	29020	36	4.1	97
"	1/8	1/8	39610	43532	18	3.3	100

Sample 4, test 5 h, temperature 5°C

20	2	8	29	29	18784	33.0	
"	1	8	110	110	9392	26.2	7.8
"	1	4	328	328	4696	20.8	18
"	1	2	867	869	2348	16.5	31
"	1	1	2006	2016	1174	13.1	45
"	1	1/2	4902	4962	587	10.4	63
"	1	1/4	10666	10950	293	8.3	81
"	1/2	1/4	14656	15193	146	6.5	87
"	1/4	1/4	21683	22858	73	5.2	93
"	1/8	1/4	30129	32398	36	4.1	97
"	1/8	1/8	42623	47165	18	3.3	100

Suspended solids data measured by means of Coulter Counter

Sample 4, test 5 h, temperature 10°C

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	36	36	18784	33.0	
"	1	8	143	143	9392	26.2	11
"	1	4	394	394	4696	20.8	24
"	1	2	953	955	2348	16.5	38
"	1	1	2031	2041	1174	13.1	52
"	1	1/2	4581	4633	587	10.4	69
"	1	1/4	9523	9750	293	8.3	85
"	1/2	1/4	12990	13412	146	6.5	91
"	1/4	1/4	18049	18863	73	5.2	96
"	1/8	1/4	23889	25316	36	4.1	98
"	1/8	1/8	30700	33056	18	3.3	100

Sample 4, test 5 h, temperature 20°C

20	2	8	30	30	18784	33.0	
"	1	8	106	106	9392	26.2	7.2
"	1	4	324	324	4696	20.8	17
"	1	2	802	804	2348	16.5	29
"	1	1	2243	2255	1174	13.1	46
"	1	1/2	5437	5511	587	10.4	66
"	1	1/4	9786	10025	293	8.3	79
"	1/2	1/4	15132	15704	146	6.5	88
"	1/4	1/4	22476	23769	73	5.2	94
"	1/8	1/4	29387	31546	36	4.1	97
"	1/8	1/8	44558	49521	18	3.3	100

Sample 4, test 5 h, temperature 32°C

20	2	8	36	36	18784	33.0	
"	1	8	124	124	9392	26.2	8.7
"	1	4	392	392	4696	20.8	22
"	1	2	927	929	2348	16.5	35
"	1	1	2146	2157	1174	13.1	51
"	1	1/2	4739	4795	587	10.4	67
"	1	1/4	10271	10535	293	8.3	85
"	1/2	1/4	14525	15052	146	6.5	92
"	1/4	1/4	20324	21357	73	5.2	97
"	1/8	1/4	23144	24483	36	4.1	98
"	1/8	1/8	31471	33947	18	3.3	100

Suspended solids data measured by means of Coulter Counter

Sample 5, test 5 h, temperature 5°C

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	2	2	18784	33.0	
"	1	8	14	14	9392	26.2	2.2
"	1	4	57	57	4696	20.8	5.5
"	1	2	267	267	2348	16.5	14
"	1	1	939	941	1174	13.1	26
"	1	1/2	2827	2847	587	10.4	45
"	1	1/4	6270	6368	293	8.3	62
"	1/2	1/4	11271	11588	146	6.5	74
"	1/4	1/4	18294	19131	73	5.2	83
"	1/8	1/4	29072	31185	36	4.1	91
"	1/8	1/8	55598	63326	18	3.3	100

20	2	8	2	2	18784	33.0	
"	1	8	11	11	9392	26.2	1.9
"	1	4	48	48	4696	20.8	5.2
"	1	2	207	207	2348	16.5	12
"	1	1	1002	1004	1174	13.1	30
"	1	1/2	2215	2227	587	10.4	43
"	1	1/4	5145	5211	293	8.3	59
"	1/2	1/4	9570	9799	146	6.5	72
"	1/4	1/4	16077	16723	73	5.2	81
"	1/8	1/4	27105	28942	36	4.1	90
"	1/8	1/8	53040	60073	18	3.3	100

20	2	8	3	3	18784	33.0	
"	1	8	16	16	9392	26.2	2.6
"	1	4	60	60	4696	20.8	6.4
"	1	2	268	268	2348	16.5	15
"	1	1	885	887	1174	13.1	29
"	1	1/2	2784	2803	587	10.4	49
"	1	1/4	5941	6029	293	8.3	67
"	1/2	1/4	10185	10444	146	6.5	79
"	1/4	1/4	16428	17103	73	5.2	88
"	1/8	1/4	24489	25988	36	4.1	94
"	1/8	1/8	40772	44928	18	3.3	100

Suspended solids data measured by means of Coulter Counter

Sample 5, test 5 h, temperature 10°C

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	2	2	18784	33.0	
"	1	8	18	18	9392	26.2	2.8
"	1	4	66	66	4696	20.8	6.1
"	1	2	282	282	2348	16.5	14
"	1	1	957	959	1174	13.1	26
"	1	1/2	2984	3006	587	10.4	43
"	1	1/4	6685	6997	293	8.3	61
"	1/2	1/4	12055	12418	146	6.5	73
"	1/4	1/4	19751	20726	73	5.2	82
"	1/8	1/4	32223	34819	36	4.1	90
"	1/8	1/8	63464	73533	18	3.3	100
20	2	8	3	3	18784	33.0	
"	1	8	19	19	9392	26.2	3.1
"	1	4	77	77	4696	20.8	7.7
"	1	2	288	288	2348	16.5	16
"	1	1	915	917	1174	13.1	28
"	1/2	1/2	2696	2714	587	10.4	46
"	1	1/4	6127	6221	293	8.3	63
"	1/2	1/4	11117	11426	146	6.5	76
"	1/4	1/4	18564	19425	73	5.2	86
"	1/8	1/4	28337	30344	36	4.1	93
"	1/8	1/8	48910	54890	18	3.3	100
20	2	8	3	3	18784	33.0	
"	1	8	14	14	9392	26.2	1.9
"	1	4	65	65	4696	20.8	6.4
"	1	2	260	260	2348	16.5	15
"	1	1	895	897	1174	13.1	29
"	1	1/2	2840	2860	587	10.4	50
"	1	1/4	5826	5911	293	8.3	67
"	1/2	1/4	9360	9579	146	6.5	77
"	1/4	1/4	15414	16008	73	5.2	85
"	1/8	1/4	24625	26141	36	4.1	92
"	1/8	1/8	44378	49301	18	3.3	100

Suspended solids data measured by means of Coulter Counter

Sample 5, test 5 h, temperature 20°C

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	3	3	18784	33.0	
"	1	8	8	8	9392	26.2	2.1
"	1	4	28	28	4696	20,8	4.5
"	1	2	131	131	2348	16.5	11
"	1	1	525	525	1174	13.1	22
"	1	1/2	1614	1620	578	10.4	39
"	1	1/4	4283	4329	293	8,3	59
"	1/2	1/4	8230	8399	146	6.5	74
"	1/4	1/4	14609	15142	73	5.2	86
"	1/8	1/4	22104	23325	36	4.1	94
"	1/8	1/8	33580	36399	18	3,3	100

20	2	8	6	6	18784	33.0	
"	1	8	13	13	9392	26,2	2.5
"	1	4	35	35	4696	20,8	4.4
"	1	2	232	232	2348	16,5	13
"	1	1	784	785	1174	13,1	24
"	1	1/2	2736	2755	587	10,4	45
"	1/2	1/4	6227	6324	293	8,3	64
"	1/2	1/4	10726	11014	146	6,5	77
"	1/4	1/4	17545	18314	73	5,2	87
"	1/8	1/4	26092	27794	36	4,1	93
"	1/8	1/8	44718	49717	18	3,3	100

20	2	8	3	3	18784	33.0	
"	1	8	10	10	9392	26.2	1.9
"	1	4	60	60	4696	20.8	6.2
"	1	2	243	243	2348	16.5	14
"	1	1	824	826	1174	13.1	27
"	1	1/2	2619	2636	578	10.4	46
"	1	1/4	5861	5947	293	8.3	64
"	1/2	1/4	10107	10362	146	6.5	76
"	1/4	1/4	16610	17300	73	5.2	85
"	1/8	1/4	25967	27653	36	4.1	92
"	1/8	1/8	46991	52511	18	3.3	100

Suspended solids data measured by means of Coulter Counter

Sample 5, test 5 h, temperature 32°C

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	2	2	18784	33.0	
"	1	8	8	8	9392	26.2	1.5
"	1	4	38	38	4696	20.8	4.4
"	1	2	183	183	2348	16.5	11
"	1	1	741	742	1174	13.1	25
"	1	1/2	2375	2389	587	10.4	44
"	1	1/4	5551	5628	293	8.3	64
"	1/2	1/4	9669	9903	146	6.5	77
"	1/4	1/4	14953	15512	73	5.2	85
"	1/8	1/4	22655	23938	36	4.1	91
"	1/8	1/8	42801	47381	18	3.3	100

20	2	8	3	3	18784	33.0	
"	1	8	10	10	9392	26.2	2.3
"	1	4	46	46	4696	20.8	6.1
"	1	2	186	186	2348	16.5	13
"	1	1	489	489	1174	13.1	21
"	1	1/2	2225	2237	587	10.4	44
"	1	1/4	5238	5306	293	8.3	65
"	1/2	1/4	8962	9163	146	6.5	77
"	1/4	1/4	13450	13902	73	5.2	85
"	1/8	1/4	20026	21716	36	4.1	91
"	1/8	1/8	39106	42929	18	3.3	100

20	2	8	2	2	18784	33.0	
"	1	8	6	6	9392	26.2	2.0
"	1	4	31	31	4696	20.8	5.1
"	1	2	135	135	2348	16.5	12
"	1	1	462	462	1174	13.1	22
"	1	1/2	1642	1649	587	10.4	40
"	1	1/4	4177	4221	293	8.3	60
"	1/2	1/4	7588	7732	146	6.5	74
"	1/4	1/4	12441	12828	73	5.2	84
"	1/8	1/4	19129	20044	36	4.1	91
"	1/8	1/8	36088	39344	18	3.3	100

Suspended solids data measured by means of Coulter Counter

Sample 6, test 5 h, temperature 5°C

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt.%
20	2	8	8	8	18784	33.0	
"	1	8	25	25	9392	26.2	1.6
"	1	4	106	106	4696	20.8	5.5
"	1	2	688	689	2348	16.5	19.4
"	1	1	3006	3029	1174	13.1	47
"	1	1/2	7816	7969	587	10.4	77
"	1	1/4	11061	11367	293	8.3	87
"	1/2	1/4	13692	14161	146	6.5	91
"	1/4	1/4	19773	20710	73	5.2	96
"	1/8	1/4	24859	26404	36	4.1	98
"	1/8	1/8	32810	35501	18	3.3	100

20	2	8	8	8	18784	33.0	
"	1	8	23	23	9392	26.2	2.0
"	1	4	128	128	4696	20.8	6.5
"	1	2	728	729	2348	16.5	19.5
"	1	1	3490	3520	1174	13.1	50
"	1	1/2	8173	8340	578	10.4	76
"	1	1/4	11611	11948	293	8.3	85
"	1/2	1/4	14341	14655	146	6.5	89
"	1/4	1/4	21032	22138	73	5.2	94
"	1/8	1/4	28367	30379	36	4.1	97
"	1/8	1/8	45089	50172	18	3.3	100

20	2	8	9	9	18784	33.0	
"	1	8	36	36	9392	26.2	3.3
"	1	4	121	121	4696	20.8	7.2
"	1	2	675	676	2348	16.5	20
"	1	1	2980	3002	1174	13.1	47
"	1	1/2	7797	7949	587	10.4	76
"	1	1/4	10751	11040	293	8.3	85
"	1/2	1/4	13563	14023	146	6.5	89
"	1/4	1/4	20063	21069	73	5.2	94
"	1/8	1/4	28862	30945	36	4.1	98
"	1/8	1/8	38240	41896	18	3.3	100

Suspended solids data measured by means of Coulter Counter

Sample 6, test 5 h, temperature 10°C

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt.%
20	2	8	5	5	18784	33.0	
"	1	8	20	20	9392	26.2	1.9
"	1	4	83	83	4696	20.8	5.1
"	1	2	540	540	2348	16.5	16.6
"	1	1	2713	2713	1174	13.1	44
"	1	1/2	7057	7181	587	10.4	72
"	1	1/4	10848	11142	293	8.3	85
"	1/2	1/4	13733	14205	146	6.5	89
"	1/4	1/4	19249	20175	73	5.2	94
"	1/8	1/4	27097	28933	36	4.1	98
"	1/8	1/8	37953	41554	18	3.3	100

20	2	8	9	9	18784	33.0	
"	1	8	21	21	9392	26.2	1.7
"	1	4	103	103	4696	20.8	5.7
"	1	2	601	602	2348	16.5	17.8
"	1	1	2909	2930	1174	13.1	46
"	1	1/2	7843	7997	587	10.4	77
"	1	1/4	11183	11496	293	8.3	88
"	1/2	1/4	13883	14364	146	6.5	92
"	1/4	1/4	19659	20625	73	5.2	97
"	1/8	1/4	25209	26798	36	4.1	99
"	1/8	1/8	29943	32184	18	3.3	100

20	2	8	6	6	18784	33.0	
"	1	8	17	17	9392	26.2	1.2
"	1	4	77	77	4696	20.8	4.1
"	1	2	545	545	2348	16.5	15.6
"	1	1	2888	2909	1174	13.1	44
"	1	1/2	7619	7764	587	10.4	73
"	1	1/4	11361	11684	293	8.3	85
"	1/2	1/4	13924	14409	146	6.5	89
"	1/4	1/4	20717	21790	73	5.2	94
"	1/8	1/4	28152	30133	36	4.1	98
"	1/8	1/8	39655	43586	18	3.3	100

Suspended solids data measured by means of Coulter Counter

Sample 6, test 5 h, temperature 20°C

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt. %
20	2	8	4	4	18784	33.0	1.5
"	1	8	20	20	9392	26.2	4.7
"	1	4	91	91	4696	20.8	16.7
"	1	2	616	617	2348	16.5	45
"	1	1	3057	3080	1174	13.1	72
"	1	1/2	8004	8164	587	10.4	84
"	1	1/4	11393	11717	293	8.3	88
"	1/2	1/4	14364	14880	146	6.5	93
"	1/4	1/4	21073	22183	73	5.2	96
"	1/8	1/4	28466	30492	36	4.1	100
"	1/8	1/8	45860	51118	18	3.3	

20	2	8	11	11	18784	33.0	1.9
"	1	8	22	22	9392	26.2	7.4
"	1	4	144	144	4696	20.8	21
"	1	2	813	815	2348	16.5	49
"	1	1	3281	3308	1174	13.1	76
"	1	1/2	7989	8148	587	10.4	85
"	1	1/4	10993	11295	293	8.3	89
"	1/2	1/4	13636	14101	146	6.5	94
"	1/4	1/4	19728	20701	73	5.2	97
"	1/8	1/4	27819	29754	36	4.1	100
"	1/8	1/8	43867	48678	18	3.3	

20	2	8	4	4	18784	33.0	1.2
"	1	8	15	15	9392	26.2	5.2
"	1	4	100	100	4696	20.8	17.7
"	1	2	632	633	2348	16.5	47
"	1	1	3100	3124	1174	13.1	76
"	1	1/2	7887	3042	587	10.4	86
"	1	1/4	11231	11546	293	8.3	90
"	1/2	1/4	14227	14733	146	6.5	95
"	1/4	1/4	20402	21443	73	5.2	98
"	1/8	1/4	26074	27774	36	4.1	100
"	1/8	1/8	37117	40561	18	3.3	

Suspended solids data measured by means of Coulter Counter

Sample 6, test 5 h, temperature 32°C

t_L	I	A	$\bar{n}'$	n	V	d_L	Wt,%
20	2	8	4	4	18784	33.0	
"	1	8	14	14	9392	26.2	1.4
"	1	4	86	86	4696	20.8	5.6
"	1	2	492	492	2348	16.5	17.6
"	1	1	2328	2342	1174	13.1	45
"	1	1/2	6658	6769	587	10.4	77
"	1	1/4	9575	9804	293	8.3	89
"	1/2	1/4	11578	11913	146	6.5	93
"	1/4	1/4	15158	15732	73	5.2	96
"	1/8	1/4	20046	21050	36	4.1	99
"	1/8	1/8	25968	27654	18	3.3	100

20	2	8	6	6	18784	33.0	
"	1	8	17	17	9392	26.2	1.7
"	1	4	74	74	4696	20.8	4.8
"	1	2	565	566	2348	16.5	18.4
"	1	1	2208	2220	1174	13.1	41
"	1	1/2	6733	6846	587	10.4	73
"	1	1/4	9777	10016	293	8.3	84
"	1/2	1/4	11538	11871	146	6.5	93
"	1/4	1/4	15316	15902	73	5.2	96
"	1/8	1/4	20420	21462	36	4.1	99
"	1/8	1/8	25594	27232	18	3.3	100

20	2	8	6	6	18784	33.0	
"	1	8	14	14	9392	26.2	1.6
"	1	4	91	91	4696	20.8	6.1
"	1	2	488	488	2348	16.5	18.0
"	1	1	2460	2475	1174	13.1	47
"	1	1/2	6595	6704	587	10.4	78
"	1	1/4	9367	9586	293	8.3	88
"	1/2	1/4	11281	11599	146	6.5	92
"	1/4	1/4	15823	16449	73	5.2	96
"	1/8	1/4	20623	21686	36	4.1	99
"	1/8	1/8	25611	27251	18	3.3	100